Museum notes.

American Numismatic Society.

New York, American Numismatic Society.

http://hdl.handle.net/2027/mdp.39015008695671

HathiTrust



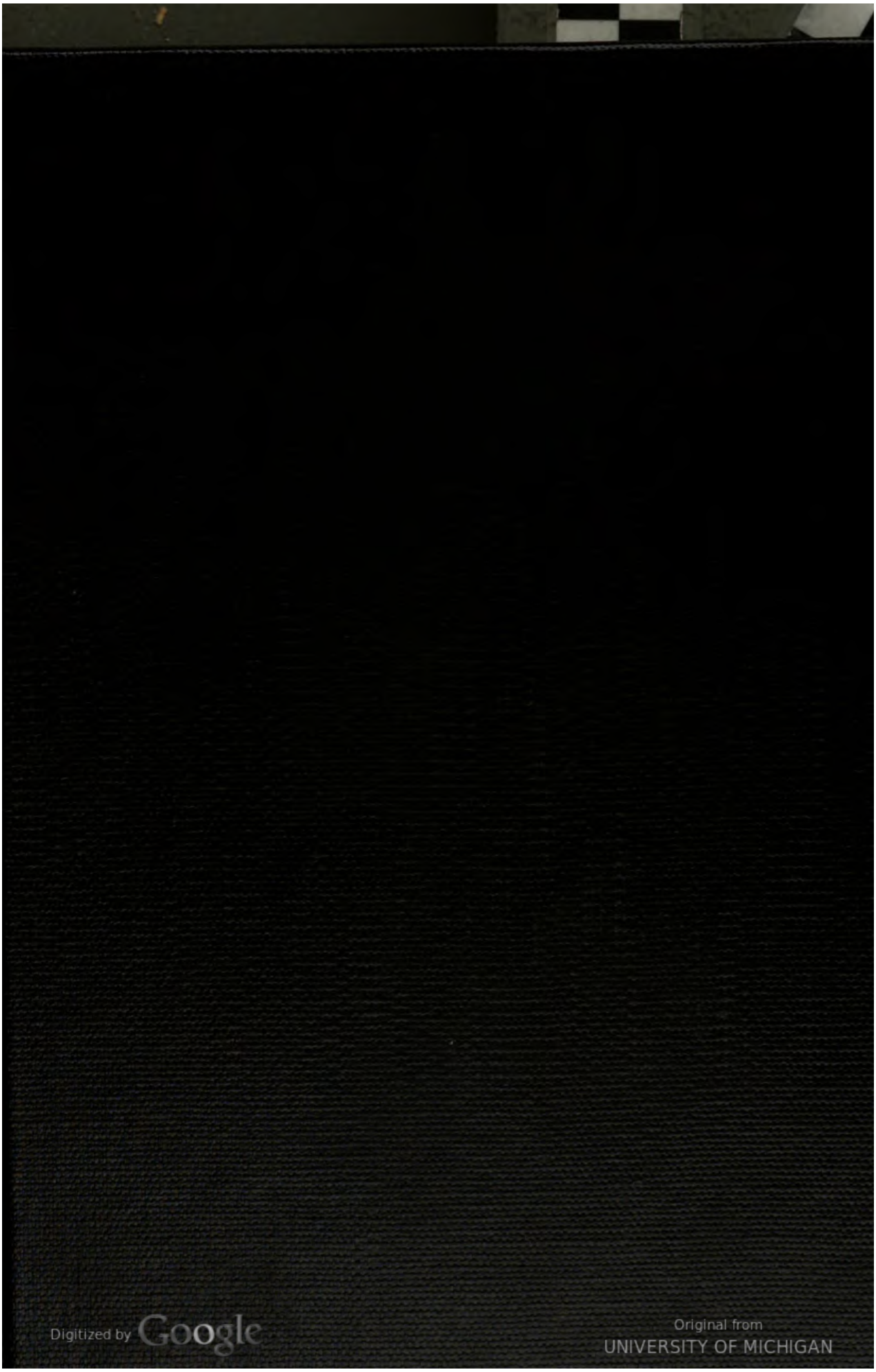
www.hathitrust.org

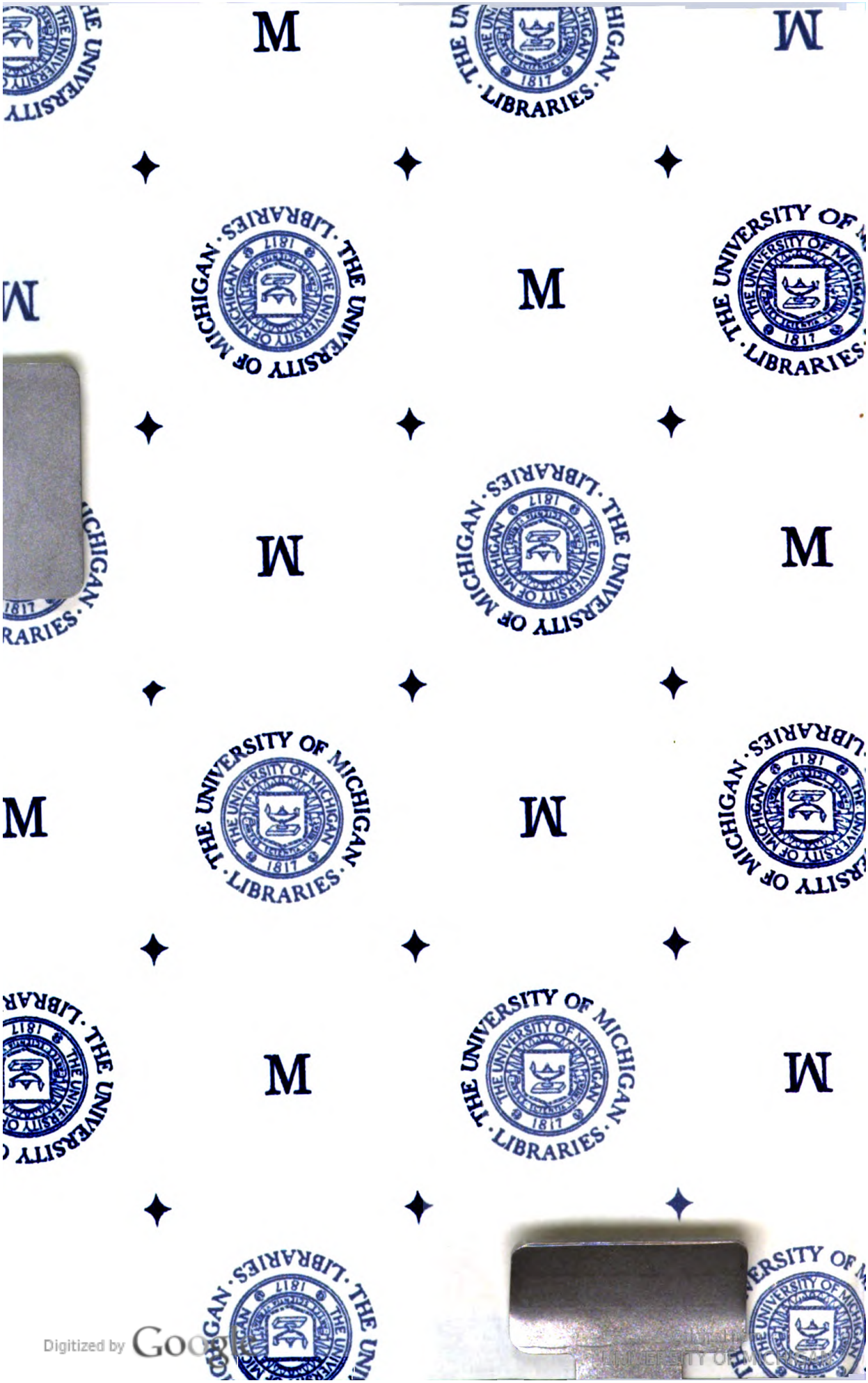
Creative Commons Attribution-NonCommercial-ShareAlike

http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

This work is protected by copyright law (which includes certain exceptions to the rights of the copyright holder that users may make, such as fair use where applicable under U.S. law), but made available under a Creative Commons Attribution-NonCommercial-ShareAlike license. You must attribute this work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work). This work may be copied, distributed, displayed, and performed - and derivative works based upon it - but for non-commercial purposes only (if you are unsure where a use is non-commercial, contact the rights holder for clarification). If you alter, transform, or build upon this work, you may distribute the resulting work only under the same or similar license to this one. Please check the terms of the specific Creative Commons license as indicated at the item level. For details, see the full license deed at http://creativecommons.org/licenses/by-nc-sa/4.0.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0


Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



Digitized by Google
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE AMERICAN NUMISMATIC SOCIETY

MUSEUM NOTES

15

THE UNIVERSITY OF MICHIGAN
PRR



C67

THE AMERICAN NUMISMATIC SOCIETY
NEW YORK
1969

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE AMERICAN NUMISMATIC SOCIETY

Founded 1858 Incorporated 1865

BROADWAY BETWEEN 155TH & 156TH STREETS
NEW YORK, N.Y., 10032

PURPOSES: The Society was founded for the collection and preservation of coins, medals, decorations and paper money and for the investigation of their history and other subjects connected therewith.

MEMBERSHIP: Applications for membership are welcomed from all interested in numismatics. Inquiries regarding membership should be addressed to the Secretary of the Society.

DUES: The annual dues for an Associate Membership are $10.00. Issues of the *Notes and Monographs*, *Museum Notes* and *Numismatic Literature* are distributed to all members.

PUBLICATIONS: The *Numismatic Notes and Monographs* consist of separately issued publications, each on a single topic, of which usually several appear each year. *The American Numismatic Society Museum Notes* is a publication, irregular in appearance, consisting of brief notes and papers, principally on items in the Society's collections. *Numismatic Literature*, published twice each year, lists current numismatic publications with abstracts of their content. *Numismatic Studies* is a series accommodating works in a larger format.

MUSEUM: The Society maintains a museum located in uptown Manhattan, New York City, which houses its offices, collections and library. Collections embrace coins of all periods from their inception to modern times, medals and decorations. Selections from its cabinets are on display in an exhibition. The library, consisting of about 20,000 volumes, covers all branches of numismatics.

The museum is open to Members and the public from 9 A.M. to 5 P.M. on Tuesdays, Wednesdays, Thursdays, Fridays and Saturdays. In addition, the public exhibition is open on Sundays from 1 to 4 P.M. The museum is closed on Mondays and the following holidays: New Year's Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Election Day, Thanksgiving Day and Christmas Day.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

CJ
15
A518
v.15-17

THE AMERICAN NUMISMATIC SOCIETY

MUSEUM NOTES

15

THE AMERICAN NUMISMATIC SOCIETY
NEW YORK
1969

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

ALL RIGHTS RESERVED BY
THE AMERICAN NUMISMATIC SOCIETY

PRINTED IN GERMANY AT J. J. AUGUSTIN · GLÜCKSTADT

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

GENERAL BOOKBINDING CO.

QUALITY CONTROL MARK

CONTENTS

GREEK

HYLA A. TROXELL AND WILLIAM F. SPENGLER. A Hoard of Early Greek Coins from Afghanistan 1

NANCY M. WAGGONER. The Early Alexander Coinage at Seleucia on the Tigris 21

JENNIFER WARREN. The Earliest Triobols of Megalopolis 31

ROMAN AND BYZANTINE

RICHARD E. MITCHELL. The Fourth Century Origin of Roman Didrachms 41

J. R. JONES. Vettienus Monetalis 73

JOAN M. FAGERLIE. Roman and Byzantine Medallions in the Collection of the American Numismatic Society 77

EUGENE DWYER. An Alexander/Macedonia Contorniate 93

ARTHUR F. JOHNSON. A New Anonymous Bronze of Constantine X 97

MEDIAEVAL

D. M. METCALF. A Hoard of "Porcupine" Sceattas 101

ORIENTAL

RICHARD W. BULLIET. A Mu'tazilite Coin of Maḥmūd of Ghazna 119

PAUL Z. BEDOUKIAN. The Copper of the Later Kings of Cilician Armenia 131

L. N. KUKURANOV. The "Urdū" Issues of Emperor Akbar 137

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

A HOARD OF EARLY GREEK COINS FROM AFGHANISTAN[1]

(PLATES I–II)

HYLA A. TROXELL
WILLIAM F. SPENGLER

In August 1966, a merchant from a town in northern Afghanistan brought to the capital city of Kabul a considerable cache of ancient silver coins, mostly Athenian tetradrachms. He offered them first to the proprietor of a curio shop, to whom he had been referred by a friend, and explained that they had been found recently in a jar in the ground by a farmer while working his land near the ancient site of Balkh.

Balkh, near modern Mazar-i-Sharif, is renowned from ancient times as Bactra (Bakhdi, Balhika), the capital of Bactria—successively an Achaemenid and Seleucid satrapy, independent Greek kingdom, Kushan and Sasanid dependency, and local stronghold of various Islamic realms. It was, according to tradition, the home of Zoroaster. Surrounded and dominated today by vast Islamic ruins, Balkh remains populated, however sparsely, and continues proudly to bear the epithet "Mother of Cities" (Umm al-Bilād). It is one of the oldest continuously-inhabited communities in the world.

The proprietor of the curio shop took a selection of the coins, including ten of the best Athenian "owl" tetradrachms (of at least 150 in the merchant's possession) and seventeen miscellaneous silver pieces (the only other coins in the lot). A local collector, who happened along immediately afterward, recognized the importance of the apparent hoard and immediately purchased the seventeen miscellaneous pieces along with two of the "owl" tetradrachms—all he could afford at the time. On learning that there had been more, however, he urged the proprietor to acquire as many of the remaining owls as possible, which the proprietor promptly did.

[1] The introductory account of the background of the hoard has been provided by William F. Spengler; the catalogue and commentary have been prepared by Hyla A. Troxell, who wishes to thank Silvia Hurter for photographing the coins, and Margaret Thompson for frequent and invaluable advice, patiently given.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The coins were all heavily encrusted, some adhering to others. The collector cleaned his acquisitions by soaking them in a mild solution of citric acid crystals and intermittently brushing them over a period of several weeks. The proprietor did the same with his remaining owls, which he subsequently sold to various purchasers. (Coin No. 5, below, shows vestiges of the encrustation, even after prolonged treatment in this manner.)

The two Athenian tetradrachms purchased by the collector (Nos. 3 and 4, below) represented two broad classes of fifth-century wreathed owls: one of quite early date, the other a typical and unexceptional piece. The collector recalled several other specimens of the earlier type in the cache, though most were of the later type.

The collector was confident that he had been the first of the dealer's clients to go over this hoard and that the circumstances of the case were essentially true as related. It was only natural for such material, if found in Afghanistan, to be brought to the central bazaar of the capital city for disposal, despite the generally modest level of sophistication and of activity in the ancient coin trade there. Perhaps most significant, however, was the fact that the collector came across few other coins of the classes comprising this hoard at that time or during the following year in other shops in the Kabul area.

The proprietor of the curio shop did manage to acquire more Athenian tetradrachms and a few other ancient Greek coins from the same source on a subsequent occasion, and some or all of them may well have come from this hoard. It is, therefore, entirely possible that the coins included in the Appendix, below, which were purchased later from the same shop in Kabul, were part of the hoard. They are listed separately, however, because of uncertainty as to their provenance.

It has also been suggested that the farmer in Balkh may have kept some pieces from the hoard, but efforts to confirm such a possibility have thus far been unsuccessful.

The twenty coins described below from this small but highly interesting hoard (the nineteen pieces mentioned above and one additional Athenian "owl"), as well as the coins discussed in the Appendix, have been made available for publication by two private collectors.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

With the exception of No. 5 and the coins in the Appendix, all the coins have been over-cleaned, although fortunately not destructively so. Surface crystallization is evident on a number of coins from the hoard, with areas of redeposited silver occasionally obscuring detail.

The hoard's main interest lies in its excessively rare (Nos. 14, 18) and apparently unique coins (Nos. 2, 15, 17) and in its unusual, although not unprecedented, provenance. An asterisk in the following catalogue indicates coins discussed in the commentary.

THE COINS

MACEDON
Lete

Obv. Satyr and nymph in conversation; around, three pellets.
Rev. Quadripartite incuse square.

1. 9.87 gr. Stater. From the dies of p. 83, 22e (attributed to Siris) of J. N. Svoronos, *L'Hellénisme primitif de la Macédoine* (Paris and Athens, 1919).

THRACO-MACEDONIAN TRIBES
Uncertain

Obv. Mounted rider.
Rev. Incuse square divided diagonally into four sections; the area inside the square raised in the fashion of a pillow.

***2.** 9.82 gr. Stater. Apparently unknown.

ATTICA
Athens

Obv. Head of Athena in Attic helmet decorated with olive wreath.
Rev. AΘE Owl; to l., olive spray and crescent; all in incuse square.

3. ↑ 17.17 gr. Tetradrachm.

4. ↙ 16.98 gr. Tetradrachm.

5. ↗ 17.64 gr. (not cleaned). Tetradrachm.

6. ↖ 4.22 gr. Drachm.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

No. 3 dates from shortly after 480 B.C., and Nos. 4 and 5 from probably no later than 440.[2] No. 6, where Athena's eye is obscured by corrosion, cannot be dated closely, but is almost certainly of fifth century date.

AEGINA

Obv. Sea-turtle.
Rev. Incuse square, divided into eight sections; three are raised, giving a semi-"mill sail" pattern.

7. 12.09 gr. Stater. From the late sixth or very early fifth century.

CARIA
Cnidus

Obv. Forepart of lion.
Rev. Head of Aphrodite wearing sphendone, her hair falling in a queue; all in incuse square.

8. ↓ 5.97 gr. Drachm. H. A. Cahn, presently undertaking a study of Cnidus' coinage, has dated our specimen to ca. 470–460 B.C.

LYCIA
Phaselis

Obv. Prow of galley in form of boar's head.
Rev. ΦΑΣ Stern of galley, in incuse square.

9. ↓ 11.01 gr. Stater.

CILICIA
Celenderis

Obv. Nude horseman with whip; circular dotted border.
Rev. ΚΕΛ Goat kneeling, head reverted.

***10.** ↗ 10.82 gr. Stater. *Rev.* above, spray of four ivy leaves and one flower. A slight flaw below the horse's forelegs does not

[2] E. S. G. Robinson ("The Tell el-Mashkuta Hoard of Athenian Tetradrachms," *NC* 1947, pp. 116–8) has shown that the tetradrachms' die-positions after ca. 440 B.C. are usually but not invariably ↑←. Anything between 8 and 10 o'clock is considered ↑← by Robinson. Our No. 4's position is about 7 o'clock; No. 5's, about one o'clock.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

seem part of a letter; it is unquestionably not part of the Π described on the following coin.

***11.** ↓ 10.72 gr. Stater. From the dies of No. 10, with Π added on obverse below horse's forelegs.[3]

***12.** ↖ 10.75 gr. Stater. *Rev.* above, spray of two (or perhaps three, with one off flan) ivy leaves.

Soli

Obv. Amazon kneeling and examining bow; to r., helmet; circular dotted border.

Rev. [ΣΟ]ΛΕΩ[Ν] Bunch of grapes; to r., laurel-branch; all in incuse square with dotted border.

***13.** → 10.90 gr. Stater. Crystallization makes this coin appear far more worn than it actually is: the design on the quiver, for example, can be seen where the deposit has flaked off.

Tarsus

Obv. King Syennesis of Cilicia[4] on horseback, holding flower in r. hand; quiver and bow are visible at his back; possibly in exergue but off flan of our coin, 𐤕𐤓 (*Tarsus*): cf. Babelon, *Traité*, pl. CVI, 1.

Rev. King of Persia kneeling and drawing bow, quiver at his back; to l., inverted ankh of form ☥ ; all in incuse square with dotted border.

***14.** ↓ 10.81 gr. Stater. From the reverse die of No. 23 of the Kabul Hoard,[5] in poorer condition, whose indistinct reverse symbol could not be recognized as an ankh.

[3] That our No. 11 is later, not earlier, than our No. 10 is shown by the absence of any raised area on No. 10 such as would be left by an erasure of the Π from the die, and by the presence on No. 11 of several obverse die flaws in a more advanced stage than on No. 10: e.g., those to the left of the horse's head, to the right of the rider's left thigh, below horse's belly, and below the center of the exergue line. The engraver of the Π on No. 11 has cleverly incorporated a good part of the flaw below the horse's forelegs described on No. 10, but its lower portion is still visible below the letter.

[4] The identification of the rider is that of C. M. Kraay, "The Celenderis Hoard," *NC* 1962, p. 15.

[5] D. Schlumberger, "L'Argent grec dans l'empire Achéménide," in R. Curiel and D. Schlumberger, *Trésors monétaires d'Afghanistan* (Paris, 1953), p. 35. The Kabul Hoard, the basis of Schlumberger's monograph, is catalogued by him in his Appendix I. Its close similarity to our hoard is discussed below.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Uncertain (*Soli-Tarsus*?)

Obv. Amazon or archer kneeling left, quiver at waist; the left elbow is bent back and the left hand, at the small of the back, holds a strung bow; the right hand, forward, appears to be carrying an uncertain object, possibly an ankh.

Rev. Ear of corn and bunch of grapes, joined by a common stem or line; between, ankh of usual form ☥; to left, apparently upward, traces of inscription which may be ⌐ Ч Λ ✕; all in incuse square.

***15.** → 3.74 gr. Tetrobol.

CYPRUS

Citium: Azbaal

Obv. Herakles wearing lion's skin and carrying club and bow; circular dotted border.

Rev. 𐤁𐤏𐤋 (*Azbaal*). Lion attacking stag; all in incuse square with dotted border.

***16.** ↓ 11.05 gr. Stater. An overstrike over Aegina, land-tortoise issue with broad-banded reverse. The turtle's head and front flippers can be seen at 5:30 o'clock on the reverse, and the scalloped outline of the shell, squared at the rear, is almost completely visible. The incuse pattern can be clearly seen on the obverse.

Salamis: Nicodamus

Obv. Recumbent ram: above, ⅄ ⅄ ✳; in exergue, [Ш] ⅄ ⅄ [8] (Ε · υ · ϝε · λε · θο[ν] · το · σε, Ἐυέλθοντος).

Rev. Ankh; in ring, ‡ (Βα, Βά[σίλεως]); around, reading counterclockwise from upper right corner, [☧] Λ ⊦ Φ (Νι · κο · δα · μω, Νικοδάμου); all in incuse square.

***17.** ↖ 11.09 gr. Stater.

Uncertain

Obv. Man-headed bull kneeling, head reverted; above, ☧ ⏀; in exergue, traces of Ш; another symbol in exergue but off the flan is most probably Φ; circular dotted border.

Rev. Astragalos; to right, ‡; all in incuse circle with dotted border.

***18.** ↓ 11.33 gr. Stater. The traditional ascription is to Paphos.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Uncertain: Onasi . . .

Obv. Bull; to l., ankh; above, winged solar disk; below, probably, although indistinct, ‡⩛ (Βα... Ο...); circular dotted border.
Rev. Eagle flying; to l., astragalos; all in incuse square.

***19.** ↑ 11.05 gr. Stater. The traditional ascription is again to Paphos.

PHOENICIA
Tyre

Obv. Dolphin over zigzag line of waves; below, murex shell; above, 𐤑𐤓𐤑𐤓 ; circular dotted border.
Rev. Owl with crook and flail over shoulder, an incuse impression outlining the types; all in incuse square.

20. ← 13.58 gr. Stater. Cf. *BMC* p. cxxvii. The inscription is there interpreted as *shiloshon* = 1/30 (mina).

COMMENTARY ON INDIVIDUAL ISSUES

Uncertain Thraco-Macedonian, No. 2.

Weight and incuse pattern show this coin to be Thraco-Macedonian, but it is apparently an unpublished issue. The diagonally divided pillow-like incuse would appear to indicate an early date, as this variety precedes the rectangularly divided quadripartite incuse in other series.[6] The coin's obverse, however, appears too accomplished for a date much prior to 500 B.C. Date as well as attribution thus remain uncertain.

Celenderis, Nos. 10–12.

Colin Kraay has recently attempted a relative chronology, based on the coins from a single large hoard, of these early issues of Celenderis with obverse type facing left.[7] Our Nos. 10 and 11 are from the dies of Kraay's No. 15, which does not have the Π.[8]

[6] E.g., H. Gaebler, *Die Antiken Münzen Nord-Griechenlands* III, 2 (Berlin, 1935), Lete 1–21. Cf. also discussion by J. M. F. May, "The Coinage of Dikaia-by-Abdera *c.* 540/35–476/5 B.C.," *NC* 1965, pp. 9–10.
[7] *NC* 1962, pp. 2–6.
[8] Babelon, *Traité*, pl. CXXXIX, 28, also from the same dies, does have the Π.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Kraay groups the coins 1) with A on obverse, 2) with Π on obverse, and 3) with no letter on obverse. Some of his coins of group 3 do appear later than groups 1 and 2; our No. 11, however, is an example of group 3 altered to fit group 2. Either Kraay's groupings must be changed, or their relationship cannot be a simple linear one.

Our No. 12, with two (or possibly three) ivy leaves on the reverse (a new variety?) is from the same obverse die as Babelon, *Traité*, pl. CXL, 4, with one ivy leaf as symbol, and thus from an immediately contiguous issue.

Soli, Tarsus, and Uncertain Cilician (*Soli-Tarsus*?), Nos. 13–15.

No. 15, previously unknown, may be related to two recently published staters with Solian types but Aramaic legend. From the same dies, they are 1) No. 22 of the Kabul Hoard[9] and 2) a coin in better condition, said to have been found in Cilicia, published by E. S. G. Robinson in 1948.[10]

These staters have for obverse type an Amazon differing somewhat from both the standard Solian depiction and from that on our coin.[11] The obverses also show an uncertain symbol, possibly a bull's head, and an ankh of form ☥. Their reverses show the standard Solian bunch of grapes in incuse square with dotted border, and an Aramaic legend 𐡏𐡍𐡀𐡂 (*'gdh*), which Robinson suggests may mean "band" or "company," referring either to a group of mercenaries or to a possible confederation or league of cities.

Our coin, with similar although not identical types, has the same provenance as at least one of the staters, and may bear the same reverse inscription, although the condition of the coin makes certainty here impossible; in the upper left-hand corner is X or 𐡂; below this, apparently, 𐡀; below this nothing is legible. Robinson

---

Babelon's text also describes an A in reverse exergue, but it is not visible on the plate of his rather corroded coin.

[9] Schlumberger, p. 35.

[10] "Greek Coins Acquired by the British Museum 1938–1948. I," *NC* 1948, pp. 56–7. The coin from the same dies mentioned by Robinson as being from the "Balkh find" is the Kabul specimen. Robinson does not mention the form of the ankh; G. K. Jenkins has kindly informed me that it is indeed of shape ☥, as described below.

[11] The figure on the poorly-preserved obverse of our coin may, however, as well be a naked male archer as an Amazon.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

believes his coin was probably although not definitely struck at Soli. Our coin, if it is an associated striking, seems to bear out Robinson's suggestion of a possible confederate issue, the members of the confederation being Soli and Tarsus, and conceivably others. In support of a Tarsian connection are 1) the dual reverse type of our coin, grape-cluster and corn-ear joined above and accorded equal prominence: the grapes are certainly Solian, while the corn-ear is used as reverse type and then as symbol on what are probably the earliest issues of Tarsus,[12] 2) the language of the inscription as well as its somewhat ambiguous sense: all other known Solian coins are inscribed in Greek, while Tarsian issues of this period have Aramaic legends,[13] and 3) the unusual form of the ankh on the staters (although not on our coin), ♀, which is found also on our No. 14, from Tarsus, and on other rare contemporary issues of that city.[14]

If indeed the staters and our tetrobol are joint issues of Soli and Tarsus, simple fiscal cooperation of some sort rather than formal alliance is most probably the explanation. Cilicia in the late fifth century, part of the Persian Empire but ruled as an entity by its own vassal king Syennesis (apparently the name borne by all the kings, like Minos), possessed no truly autonomous cities.

Instances of similar coinages and of fiscal cooperation are common in the fourth century among the larger cities of Cilicia Pedias. Tiribazus struck one series of coins with the same types at Issus, Soli, Tarsus, and possibly Mallus,[15] and another at Mallus and Soli.[16] Pharnabazus struck coins with his name and *Kilik*... in Aramaic;[17] a few specimens bear in addition ΚΙΛΙΚΙΟΝ.[18] Two issues of Mazaeus of Alexander's time bear different letters Ι (or ΙΣ), Μ,

[12] *Traité*, pl. CV, 16–18, and Kraay, *NC* 1962, pl. II, 10–15. Kraay's hoard includes some issues previously unknown.
[13] With one exception: *Traité*, pl. CVI, 8.
[14] *Traité*, pl. CVI, 1–8.
[15] *BMC*, Issus No. 3, Soli No. 26, Tarsus No. 12, and p. lxxviii.
[16] *BMC*, Mallus No. 28, Soli No. 27.
[17] *BMC*, Tarsus Nos. 13ff. Although these issues are usually attributed to Tarsus, O. Mørkholm has suggested the possibility that they were struck in different Cilician mints ("A South Anatolian Coin Hoard," *Acta Archaeologica* 1959, p. 187). Wherever struck, however, they are evidence of a common policy or joint undertaking.
[18] *Traité*, pl. CVIII, 6–7.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Σ, and T, unmistakably referring to the four cities, but are proved by style and varying combinations of these letters to originate from the same mint.[19] Finally, on issues of Mazaeus, J. P. Six has seen in the grapes and corn-ear (which occur both as part of the type and as symbols), ankh (always symbol), and eagle (always part of the type), participation of Soli, Tarsus, Mallus, and Adana respectively.[20]

Our coin and the staters thus need not be understood as attesting a specific political or military alliance (about which our scanty historical record is in any case completely silent). The simplest explanation is that the coins form the earliest evidence of financial cooperation among the major cities of Cilicia Pedias.[21]

In view of the strange depiction of the Amazon on both staters and tetrobol, it is difficult to believe that these issues were struck at Soli; it is equally difficult to accept that Tarsus would strike the strictly Solian types of the staters. Wherever struck, however, the three coins can be compared with Solian and Tarsian issues to arrive at an approximate relative dating. Roughly contemporary issues of Soli are:[22]

[19] *BMC*, Tarsus Nos. 65–6 and 67–78. These have been closely dated by E. T. Newell ("Tarsus under Alexander," *AJN* 1918, pp. 84–90 and 110–5). Hill and Newell agree that the coinage represents a joint effort of the cities involved.

[20] "Monnaies grecques, inédites et incertaines," *NC* 1895, pp. 192–7. This is not impossible in principle, but the inclusion of Adana would seem unlikely, as it struck nothing else known until the second century, and then only bronze (with an occasional eagle as type). Also unlikely, for the same reason, is Six's suggestion that the eagle-head found as symbol on some coins of the types of our No. 14 represents the participation of Adana in that issue. Nevertheless, it is interesting to note that Six believed in the possibility of this sort of financial cooperation in fifth as well as fourth century Cilicia.

[21] A few puzzling Cilician staters with goat (sometimes winged) and owl as types have been variously ascribed to Aegeae and Celenderis (Six, *NC* 1895, pp. 203ff.; *BMC*, Celenderis Nos. 17–18, p. xlix, and pl. XL, 5–6, the latter two in the Hunterian Collection). The coins appear to be of approximately late fifth century date. One bears as symbols ankhs of the early Tarsian shape ♇ (so described in the *BMC*, although elsewhere considered the more usual form ♀: e.g., Babelon, *Perses Achéménides*, p. LXI. G.K. Jenkins has recently kindly confirmed the *BMC* description). Two are inscribed, and although it is tempting to read the rather garbled inscriptions, very similar to our 𐤏𐤋𐤀𐤎, as the same, and thus to explain these coins as associated fifth-century joint issues, the true reading does seem to be simply 𐤏𐤋𐤎, perhaps referring to an unknown satrap or town Ada.... I am much indebted to Harald Ingholt for help and advice on this point.

[22] The numbering follows Kraay's, *NC* 1962, p. 8.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

IIa. Those with helmet and laurel branch as symbols; the tetrobol's reverse is framed in a tilted square, or diamond, without dots,[23] and

IIb. Those with satyr-head and fly as symbols; the tetrobol's reverse is framed in a dotted square aligned as on the staters.[24] During the course of this issue the grape-cluster develops a long drooping tendril; our coin and the associated staters must date before this development.

Robinson considers his coin stylistically between these two groups, but more closely resembling the former. Our coin appears to support this, as it appears together in our hoard with an example of group IIa, our No. 13; and as its reverse lacks the dotted border, as do fractions of group IIa. The alignment of our coin's reverse square as on fractions of group IIb is clearly necessitated by its dual reverse type.

Our coin and the associated staters are most probably nearly contemporary with our No. 14, also, as the same unusually-shaped ankh appears on both, and as they are found together in both our hoard and the Kabul Hoard, each pair exhibiting within itself approximately the same degree of wear.

Our Solian issue has been dated as early as 450 B.C. by Hill, to ca. 460 by Babelon, and even to the first quarter of the fifth century by Robinson.[25] Kraay convincingly reassigns it to the very late fifth century; our No. 14 he would similarly reassign to the years 410–400 B.C.[26] Our No. 15 would then fall within the same decade, issued immediately after the corn-ear issues of Tarsus, which Kraay dates to ca. 410. While the relative degree of wear exhibited by the coins in our small, corroded, and over-cleaned hoard cannot be adduced as much support for these lowered dates, it surely does not contradict them.

Citium: Azbaal, No. 16.

Cypriot coins struck over non-Cypriot issues are rare. Our coin is apparently the second published example of a coin of Azbaal struck

[23] *Traité*, pl. CVI, 14–15.
[24] *Traité*, pl. CVI, 17–18.
[25] Hill, *BMC*, p. 144; Babelon, *Traité*, II, 2, p. 366; Robinson, *NC* 1948, p. 58.
[26] *NC* 1962, pp. 14–15.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

over an Aeginetan coin clearly identifiable as a land-tortoise issue. The first, published by S. P. Noe in 1954,[27] has been the key bit of evidence in attempts to raise the traditional date, 404 B.C., of the beginning of the land-tortoise series.[28]

Our coin, like Noe's, shows no evidence of how the weight of the original piece was reduced.

Salamis: Nicodamus, No. 17.

Our only previous knowledge of Nicodamus' existence has been numismatic, from fractional issues.[29] Our coin is apparently his first recorded stater. It is also the first published coin linking his name with that of Euelthon.

Uncertain Cypriot, No. 18.

Two other legible examples of this rare issue are listed in the *BMC*.[30] No other examples have been published. The three coins are from the same obverse die, and from three different reverse dies.

Hill, in the *BMC*, tentatively reads the obverse inscription as 𐠋 𐠊 above and 𐠃𐠎 below, interpreted as Βω-κα-ρο-σε, Βώκαρος, a river which, according to a garbled account in Hesychius (s.v. Βώκαρος), may have been in Cyprus.[31] Representation of a river by the man-headed bull, unique on Cypriot coins, would be reasonable, but the *BMC*'s reading of the inscription is incorrect, as has been pointed out by A. J. Seltman.[32]

[27] "Countermarked and Overstruck Greek Coins at the American Numismatic Society," *ANSMN* 6 (1954), p. 90.

[28] E.g., E. S. G. Robinson, "A Hoard of Archaic Greek Coins from Anatolia," *NC* 1961, p. 111. Azbaal is traditionally dated to ca. 450–425 B.C. C. Kraay, however, arguing from his coins, has suggested the possibility that his reign extended into the last quarter of the century (*NC* 1962, p. 13). The slightly worn condition of our single coin is unfortunately of little help here.

[29] *BMC*, pp. xcii–xcv.

[30] Pl. VII, 1 (in the British Museum collection), and pl. XXI, 2 (Weber 7701 = Jameson 2334, now in the ANS collection). Pl. XXI, 1 (Babelon, *Perses Achéménides*, p. 743; pl. XX, 11; in the Bibliothèque Nationale) illustrates a similar coin whose obverse shows an ankh below and traces only of an inscription above; its reverse is described as showing 𐠊 ‡, but this is not clear on the plate. This last coin, while very possibly of the same issue as ours, is so indistinct as to be of no help, and is not included in the discussion.

[31] Pp. lxv and 35.

[32] "Some Cypriot Coins," *NC* 1964, p. 78.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Seltman suggests that the inscription might possibly be read as 𐊧𐊰 𐊫 𐊬 (Σι-ρο-μο?-σε), giving the name of a king Σίρωμος. This seems to me almost certainly correct. The upper two symbols, 𐊧𐊰, only partially preserved on the coins listed in the *BMC*, are perfectly clear on our coin despite its poor condition. The 𐊫 to the left below is clear on the *BMC* coins. The only doubtful symbol is that at lower right, and it is most probably 𐊬, μο, as 1) only three Cypriot symbols are rounded at the top (𐊨, 𐊧, and 𐊬), and the portions of the symbol in question preserved on the *BMC* coins are in scale only with 𐊬; 2) a plated drachm similar to the staters was published by Hill in 1926;[33] its inscription is somewhat garbled, but below to the right is 𐊭, a variant of 𐊬, which is interpreted by Hill as μο; and 3) two similar diobols in the ANS collection, although in poor condition, also appear to have 𐊬 to the right below.

The three reverses each have 𐊵, βα or πα, to the right. Our coin has no symbol to the left. The coin illustrated on *BMC* pl. XXI, 2, shows traces of something to the left, given in the Weber and Jameson catalogues as 𐊰, σι. This is incorrect: the coin, now in the ANS collection, has a clear ankh of shape 𐊮 to the left. The British Museum's own coin (pl. VII, 1) does, however, have 𐊰, σι, to the left. This reverse inscription 𐊰 𐊵 is interpreted by Hill as Βα-σι-... (Βασί[λεως]) or as Πα-σι... (name of unknown king). I suggest, instead of either, Βα... Σι..., a standard usage, for Βασίλεως Σιρώμου.

Herodotus gives the descendants of Euelthon of Salamis, whose reign extended at least until 530 B.C., as Siromos–Chersis–Gorgo and Onesilos; the latter two, brothers, reigning from 499 or earlier to 480 B.C.[34] The interval between 530 and 499 seeming too short for two generations, Siromos' existence has been questioned: as Herodotus VII.98 mentions Gorgo in company with a son of Siromos of Tyre, the suggestion is that from this passage the Semitic name Siromos was intruded into the genealogy of V.104. These coins, attesting Siromos as a king of Cyprus, seem to absolve Herodotus of such a gross blunder and support his Salaminian genealogy.[35]

[33] "Greek Coins Acquired by the British Museum in 1925," *NC* 1926, p. 126.
[34] IV.162, V.104, VII.98.
[35] The Σίρωμος legend of the coins does, though, destroy at least one of Hill's interpretations of the many doubtful inscriptions on coins of Salamis. Siromos of Tyre is known in the Septuagint as Χειράμ (Hiram). Hill proposes (*BMC*,

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Our coin cannot however have been issued by the Siromos who was son of Euelthon. It can hardly be so early; nor can it be fitted into the long series of Salaminian issues with unvarying obverse type of recumbent ram. The *BMC*'s attribution to Paphos is tentative in the extreme.[36] Our Siromos may be a descendant or namesake of Euelthon's son, but his place of reign (which must have been brief, attested as it is by only one or two obverse dies) is unknown.

Uncertain Cypriot: Onasi . . ., No. 19.

The *BMC*'s attribution of this issue is to Paphos.[37] A. J. Seltman,[38] however, quotes T. B. Mitford,[39] who elucidates the difference between the Paphian signary and that used elsewhere on the island. In particular, the signs 8 and ⩛ are not used at Paphos. Our coin is therefore probably not Paphian. Seltman suggests as possible reattributions Amathus, Soli, or Marium.[40]

GENERAL COMMENTARY AND CHRONOLOGY

Persian sigloi played a merely accessory rôle in the pre-Hellenistic Persian monetary system, and this rôle was, further, limited chiefly to Anatolia. The staple silver currency of the Persian Empire before Alexander was Greek silver, to which was added from the late fifth century on coinage imitating the Greek in greater or lesser degree but struck within the Persian Empire. Coined silver, a major export of the Greek world in the late sixth and the fifth centuries, passed in eastern lands on bullion, not face, value. These conclusions, with the

p. xc) that certain Salaminian coins with reverse inscription ki be attributed to Siromos, the ki being understood as standing for Χειράμ. Our coins' spelling, agreeing with Herodotus', would appear to rule out this interpretation.

[36] This point is made again by Hill in *A History of Cyprus* (Cambridge, 1940), p. 8, n. 1.

[37] *BMC*, pp. lxxi–lxxiii.

[38] *NC* 1964, pp. 78–81.

[39] *Studies in the Signaries of South-Western Cyprus* (London, 1961).

[40] Coins of the same types as ours occur in the Kabul Hoard (Nos. 25–7) and are catalogued by Schlumberger under Paphos. E. S. G. Robinson, in listing the mints represented in the Kabul Hoard ("A 'Silversmith's Hoard' from Mesopotamia," *Iraq* XII, p. 50) omits Paphos but adds Amathus. Does this reflect his opinion that the coins belong to Amathus?

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

hoard evidence supporting them, have been well presented by others[41] and need not be further discussed here.

Our hoard, then, in its almost completely Greek character, is not the exception but the rule among contemporary hoards found in areas of the Persian Empire other than Anatolia. Sigloi are rarely present in these hoards, and almost invariably in small numbers.

Three other hoards from the eastern part of the Empire will here be cited as parallels; all, especially the last, are strikingly similar. They are 1) a hoard from Mesopotamia, probably Babylon,[42] 2) a hoard from Malayer, in northwestern Iran, between Mesopotamia and the Caspian Sea,[43] and 3) the Kabul Hoard.[44]

The Babylon Hoard contained fragments of worked silver as well as coins of Athens (6), Aegina (1, land-tortoise variety), Samos (1), Lycia (2), Aspendos (1), Salamis (2), Arados (1), Sidon (1), and Tyre (1), and 7 sigloi. The bulk of the coins date from the fifth century; a few are of the very early fourth, and Robinson dates the hoard's burial to the middle of the first quarter of the fourth century. Notable is the high proportion of Athenian coins; this proportion is high in all the hoards here considered and overwhelmingly so in ours.

Schlumberger catalogues that part of the Malayer Hoard acquired by the Teheran Museum and by a few private collectors. Robinson lists coins from the hoard which appeared, shortly after its discovery, on the European market. The two lists vary considerably, and it may be useful to give here the combined totals: Messene (1 coin), Syracuse (5), Alexander I of Macedon (3), Bisaltae (2), Acanthus (8), Terone (1), Corcyra (3), Leucas (1), Thebes (3), Athens (167), Aegina (45), Melos (6), Sinope (2), Clazomenae (1), Chios (1), Samos (2), Cnidus (1), Carpathos (1), uncertain Carian (1), Lindos (1), Lycia (5), Citium (2), Salamis (1), Sidon (30), Tyre (98), Barce (1), and Persia

[41] E.g., by Robinson, (*Iraq* XII), and Schlumberger.
[42] The hoard published by Robinson; see my note 40. His title may be misleading: his conclusion is that the fragments of worked silver in the hoard indicate not a silversmith's ownership but the bullion character of the hoard.
[43] Discussed by Schlumberger, Appendix III, and by Robinson, *Iraq* XII, pp. 50–1. Robinson describes the hoard merely as from "an unspecified place in Persia;" that it is the Malayer Hoard is stated by Schlumberger, p. 54, n. 1.
[44] Schlumberger, pp. 3–5 and Appendix I.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

(1 siglos and one large shekel[45]). These coins, which may not, of course, represent the complete hoard, total 394. The hoard accords well with ours in its wide geographical distribution and high proportion of Athenian coins. Its chief differences are its inclusion of West Greek coins, its high Phoenician component, and its lack of Cilician issues. If the large shekel, by far the latest of the coins, actually formed part of the hoard, burial would most probably have occurred during the Macedonian invasion. If, however, the shekel is an intrusion, which appears not unlikely, both Robinson and Schlumberger date the hoard's burial to ca. 380–375.

The most striking similarity, however, is shown by our hoard and that from Kabul. The latter was found in 1933, on the eastern edge of the city. It is rumored to have contained more than a thousand pieces, although Schlumberger doubts this as no likely pieces appeared on local markets in succeeding years. A portion, if not the bulk of the hoard, was acquired by the Kabul Museum. This consisted of 8 sigloi; 43 pieces of Indian or indigenous silver of two varieties; 18 silver fragments, mostly of jewelry; and 64 Greek coins: 33 Athenian, 1 imitation Athenian, and 30 non-Athenian. These other cities represented are Acanthus (2 coins), Thasos (1), Corcyra (1), Aegina (4), Melos (1), Lampsacus (1), Erythrae (1), Chios (1), Samos (2), Cnidus (1), uncertain city of Lycia (1), Aspendus (2), Side (1), Celenderis (2), Mallus (1), Soli (1),[46] Tarsus (1), Citium (2), Paphos (3),[47] and Salamis (1).

The general geographical correspondence to our hoard is marked; the Athenian proportion is very high; the oldest coins, as in our hoard and that from Malayer, are Aeginetan. The extremely close similarities in the Cilician and Cypriot areas must be detailed further. The Celenderis coins from both hoards are roughly contemporary, with types facing left. Both hoards contain possible joint issues of Soli and Tarsus, if the conjecture above is correct. The Tarsian coins are from the same issue and the same reverse die. Both hoards con-

[45] Of the type of *Traité*, pl. LXXXIX, 6–9, but with an Aramaic *mem*. This issue is usually assigned to Alexander's time.

[46] So ascribed by Schlumberger; I suggest that it is a joint issue of Soli and Tarsus. See commentary on our Nos. 13–15.

[47] So ascribed by Schlumberger, but perhaps of Amathus or another uncertain Cypriot city; see commentary on our No. 19.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

tain coins of Azbaal of Citium. Both contain coins of the same issue, with astragalos symbol, of King Onasi... of an uncertain Cypriot city. Our Salaminian coin is an issue of Nicodamus: the Kabul coin from Salamis was struck by Euanthes, who is listed as Nicodamus' successor in the *BMC*.[48]

The chronology of our hoard also agrees almost perfectly with that of the three parallels cited. The most worn coin is that of Aegina, most probably of the late sixth century. Our best-preserved coins are those of Celenderis, which date from the closing years of the fifth century.[49] These do, however, show some wear, and the same is true of our Tarsian coin, which has been dated to 410–400.[50] A burial date of perhaps 390 to 380 would allow for this wear and for the coins' journey to northern Afghanistan; a later date would appear to be ruled out by the absence of Cilician satrapal issues. This proposed date agrees well with Schlumberger's proposed burial date, 380 B.C., for the Kabul Hoard.

Lack of historical knowledge makes it impossible to suggest a specific event which might have occasioned our hoard's burial in remote Afghanistan. Persia's possessions to the east of the Hindu Kush were lost at some point between 401 and Alexander's time, but we do not know how or when.[51] Perhaps our hoard's burial was due to circumstances connected with this loss; perhaps general unsettled conditions in the eastern Empire in the first quarter of the fourth

[48] This extremely close similarity between our hoard and that from Kabul, coupled with the fact that our hoard alone, in its non-Athenian section, contains a strikingly high proportion of rare and unique Greek coins, might well suggest that the two hoards formed part of the same deposit, our hoard representing a knowledgeable "first pick." Several considerations rule against this. Some thirty-three years elapsed between the appearances of the two hoards; surely no precedent exists for such an interval between the appearances of sections of a single hoard. The very large number of Athenian tetradrachms which our hoard is said to have contained also argues against any deliberate withholding of a small but valuable selection from the Kabul Hoard. Finally, our hoard is reliably reported to have been purchased in a heavily encrusted condition, so severe as to render numbers of the coins unrecognizable. There is thus no valid reason for considering the circumstances of our hoard's discovery other than substantially as related.

[49] Kraay, *NC* 1962, p. 15.

[50] Ibid. The earlier date would seem more probable on the basis of our coin's wear.

[51] *CAH*, VI, p. 19.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

century are hinted at by the close burial dates of the four hoards here discussed; perhaps our hoard was interred for reasons purely local or personal. In any case, it remains for us a happy source of new coin varieties and one more compelling witness to the far-flung distribution of pre-Alexandrian Greek silver: "... jusqu'à la conquête macédonienne, la monnaie d'argent originaire du monde grec est restée l'une des principales constituantes de la circulation de l'empire."[52]

APPENDIX

Possibly although not certainly part of the hoard, the following three coins were found in Afghanistan, reportedly at Balkh also. They are included here as further evidence for the circulation of early Greek silver in that remote area.

Macedon: Acanthus

Obv. Lion attacking bull; in exergue, floral ornament; above, ⊙; circular dotted border.
Rev. Quadripartite incuse square.

A. 17.89 gr. Tetradrachm. The rather high weight may be due to the apparently incomplete cleaning of the obverse field. This issue has been dated to ca. 510–500 B.C. by J. Desneux: cf. his Nos. 64–6.[53]

Thraco-Macedonian Tribes: Pierii

Obv. Boar standing left above large central dot; below, four "roses of Pangaeum" alternating with at least four and probably five dots; circular dotted border.
Rev. Incuse square, irregularly divided.

B. 8.62 gr. Stater. Cf. Svoronos, pp. 131–2, Nos. 4–7.[54]

Thrace: Dicaea

Obv. Bearded head of Herakles in lion's skin headdress.
Rev. Diagonally divided incuse square; two quarters are further divided, giving six sections in all.

[52] Schlumberger, p. 24.
[53] "Les tétradrachmes d'Akanthos," *RBN* 1949, p. 71.
[54] *L'Hellénisme primitif de la Macédoine.*

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

C. 9.86 gr. Stater. This series has recently been dated by J. M. F. May to ca. 540/35–492 B.C.[55] Our coin, from the obverse die of May's No. 6, adds another example to the ten of this issue known to May, and would have been struck ca. 530–510.

[55] *NC* 1965, pp. 1–16.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

THE EARLY ALEXANDER COINAGE AT SELEUCIA ON THE TIGRIS

(PLATES III–V)

NANCY M. WAGGONER

In the course of a detailed study of the Alexander mint at Babylon, it became apparent that the issue which Edward T. Newell had considered the final emission of Babylon should be reattributed to Seleucia on the Tigris under Seleucus I. This small issue, represented by thirteen tetradrachms, has now been correlated with Group D of Newell's Series I at Seleucia. At the same time, two recent discoveries necessitate a realignment and redating of his entire first series at this mint. The combined evidence for reappraisal is presented here, along with the numismatic and political implications that it entails.[1]

The issue of tetradrachms transferred to Seleucia, like those attributed to Babylon, bear Alexander's well-known types: the head of Herakles in lion scalp on the obverse, and on the reverse, the enthroned figure of Zeus accompanied by the legend ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ. The issue is characterized by a helmet symbol in left field and includes either the monogram 𐤀 employed with ΝΟΥ or ΑΙ, or 𐤀 alone (PLATE III, 1–3).[2] The reverse style is very similar to that exhibited by the latest posthumous series from Babylon. Three

[1] Based on foundations laid by E. T. Newell, the study of the mint at Babylon is currently being prepared for publication by the American Numismatic Society. In this study the evidence supporting the new arrangement at Seleucia is presented in its entirety. The coinage from Babylon consists of eleven closely knit lifetime and posthumous issues which together spanned the period between ca. 331/30 and 305 B.C. The chronological sequence is securely fixed by die linkage, stylistic development, and by the evidence of dated hoards. A catalogue not only of these coins, but also of the transferred issue, is incorporated in the mint study; only those specimens are mentioned and illustrated here which are relevant to the discussion of the early operation of the mint at Seleucia. For the first series at Seleucia see E. T. Newell, *The Coinage of the Eastern Seleucid Mints, Numismatic Studies* 1 (New York, 1938), pp. 12–23, pls. 1–4.

[2] The specimens illustrated are from the collections of the ANS with the exception of the following: No. 3—Private Coll., U.S.A.; Nos. 11, 17, 20—London, BM; Nos. 12, 15—Paris, BN; No. 14—Vienna, Bundessammlung von Medaillen, Münzen und Geldzeichen.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

specimens chosen for illustration here, all struck from the same obverse die, represent the long issue controlled by the monogram ⋔ within a wreath (PLATE III, 4–⊢P), and the last small emission distinguished by the letters BΛ in conjunction with either an encircled M, or ⋔ (PLATE III, 5–6). The latter monogram is that which occurs as a principal control in the reattributed helmet series. Stylistic features common to all are to be found in the long upper torso of the seated figure on the reverse, the construction of the throne, and details in the folds of drapery. Especially noteworthy are the way in which the himation envelops the lower part of the legs, the end of the mantle as it falls from the lap over the side of the throne, and the small upright fold which rests on the seat behind Zeus. These considerations undoubtedly led to Newell's attribution of the helmet issue to Babylon, and he must have had these coins in mind also when he described the first issues at Seleucia: "In ... types, weight, and fabric, these new issues are but the continuation of the immediately preceding coinages of Babylon."[3]

Although the year in which Seleucus founded Seleucia on the Tigris as his capital is not exactly known, this event and his Indian campaign are presumed to have taken place between 311 and 301 B.C.[4] Newell shared the opinion of those who believed that the city was founded by 306/05, the year in which Seleucus officially assumed the royal title, and that he probably invaded India in 304/03 B.C.[5] In any case, his proposal of 305 as the opening date for the mint at Seleucia seems justified by the evidence from Babylon which strongly indicates that the output from that city was terminated in the same year.

[3] *ESM*, p. 10.

[4] The founding of Seleucia on the Tigris is mentioned in Appian, *Syr* 58 and Strabo, XVI.739. For the Indian campaign of Seleucus see Appian, *Syr* 55; Justin, XV.4.21.

[5] Newell mentions various opinions concerning the foundation of Seleucia in *ESM*, p. 10. The proposed date for the Indian campaign is cited on p. 19, notes 21 and 23, of the same work. Georges Le Rider has recently reattributed to Seleucia certain bronzes with Alexander's name assigned by Newell to Susa under Seleucus I. He states that confirmation of his attribution would in itself imply a founding date for Seleucia between 311 and 306/05, that is, before Seleucus officially assumed the title of King (*Suse sous les Séleucides et les Parthes, Mémoires de la mission archéologique en Iran* XXXVIII (1965), pp. 31, n. 8, and 297).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The first coinage assigned by Newell to Seleucia continues the Alexander types, struck now in the name of Seleucus and with Zeus sometimes holding a small figure of Nike rather than an eagle. These coins, which constitute Series I, are arranged in five annual groups (A–E) dated between 305 and 300. The second series is composed of twenty groups (A–T) and covers the remaining period of Seleucus' reign, from 300–280 B.C. It represents new types which bear the head of Zeus as obverse type, and which depict on the reverse Athena in a chariot drawn by elephants.[6] The first series, with the types of Alexander is of concern here. The first three groups, A–C, employ ⋔ as the dominant monogram which during Group B at Seleucia is contained within a wreath. The three groups are closely knit by die linkage, overstrikes, and by the recutting of one letter or monogram over another; but the style is not especially close to preceding issues from Babylon. In fact, entirely different diecutters seem to have been at work. On the other hand, Groups D (*ESM* 19–26) and E (*ESM* 27–28) do for the most part reflect the technique and style of Babylon. One tetradachm under Group E (*ESM* 27, A29–P86: PLATE III, 7) may be compared, for example, with a specimen of the wreathed monogram issue at Babylon which cannot have been minted after 307/06 (PLATE III, 8). Obvious similarities include the profile on the obverse, the treatment of the hair over the forehead, and the lion's lower jaw and mane, especially the lock that curls around behind the ear. The throne, body proportions of the seated figure, and details of drapery on the reverse are also comparable. Reverses of Group D, represented here by PLATE IV, 9 and 13, follow in almost precise detail the stylistic patterns discussed above in connection with the helmet series and the late specimens from Babylon. However, the relatively smaller heads with more delicately rendered features on the obverse of the helmet tetradrachms and on the coins of Group D seem closer to each other than to those from Babylon, in spite of the fact that the treatment of individual locks of hair and mane remain essentially the same. Moreover, one might identify the NOY on the

[6] *ESM*, pp. 23–52, and pls. 6–12. Newell begins this elephant series in 300 B.C., suggesting (pp. 38–39) that the types were prompted by the victory over Antigonus at Ipsus in 301 which established Seleucus as sovereign over most of Alexander's former territory in Asia.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

reverse of No. 1 of the helmet issue with the letters NO on PLATE IV, 9–12 in Group D. Also, AI as it appears with T on a recent acquisition unknown to Newell (*SNG* Berry 1329: PLATE IV, 13),[7] may well refer to the monogram on PLATE III, 2 in the helmet issue. It may be observed that No. 9 with NO on reverse (*ESM* 24), Nos. 11–12 with NO-Σ (*ESM* 19), and No. 13, controlled by AI-T, are all struck from the same obverse die, Newell's Obverse A25.

On the basis of the foregoing it would seem that Newell's Groups D and E were actually struck before his Groups A–C; and that the helmet series belongs not to Babylon but to Seleucia on the Tigris, as a supplementary issue minted contemporaneously with D. This would not be the only instance when the names of Alexander and Seleucus I are simultaneously employed; for at Ecbatana several groups of coins were minted in both names.[8] In fact, the name of Alexander appears once at Seleucia, on a stater of Group B which shares an obverse with pieces from both A and B bearing the name of Seleucus.[9]

Two recent discoveries change without question the dating of Newell's Series I. The first, made by Margaret Thompson, shows Newell's Obverse A25 from Group D at Seleucia (see above) to be identical with Obverse A19 under nos. 782 and 783 at Carrhae (PLATE IV, 14 and 15).[10] On the reverse of 783 the name of Seleucus has been replaced by that of Antiochus I, his son and successor. The anvil die evidently saw long wear, and the sequence of its use can be established by a progressive break which eventually covers the lobe of Herakles' ear. The die shows no sign of wear when employed with NO (*ESM* 24, A25–P80: PLATE IV, 9), nor when used with NO-Σ on the London specimen reproduced by Newell (*ESM* 19, A25–P74b: PLATE IV, 11). The break occurs first on the Paris duplicate of the latter coin, which Newell also cites but does not

[7] *Sylloge Nummorum Graecorum, The Burton Y. Berry Collection*, Part II (New York, 1962).
[8] *ESM*, Series III, Groups B, C, and D, pp. 177–179, 181–182, dated between 293 and 280.
[9] *ESM*, no. 11, bearing Alexander's name; nos. 1 and 10, with the name of Seleucus.
[10] E. T. Newell, *The Coinage of the Western Seleucid Mints, Numismatic Studies* 4 (New York, 1941), pp. 45, 47; pls. 5, 19 and 6, 1.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

reproduce (*ESM* 19, A25–P74a: PLATE IV, 12).[11] He could not have been aware of this break, since it reverses his sequence for NO-Σ (*ESM* 19–21) and NO (*ESM* 23–24). When the die was struck with the A/-T reverse (*SNG* Berry 1329: PLATE IV, 13) the break had spread and remained in the same condition on the two tetradrachms assigned to Carrhae. Quite certainly all of these coins were minted at Seleucia on the Tigris. On the Paris tetradrachm of Antiochus the royal title appears downward on the right and the name is inverted in the exergue. The only control is Γ, which we find alone or employed with other lettering in the quadriga series,[12] and on lion staters of Seleucus I which Newell believed were still being minted at Babylon after 305 B.C.[13] The lettering on the coin of Seleucus from Carrhae consists of A in left field and Φ beneath the throne. The A is recut over earlier lettering which Newell thought might have been the monogram ⋔, employed with PA on Carrhae tetradrachm 780 and with Ψ on drachm no. 781. If this is true the latter two coins would also have to be transferred to Seleucia, together with a tetradrachm now missing, with ⋔ and Φ on the reverse. There would be left for Series II at Carrhae (dated ca. 290–280 B.C.) one stater (no. 778) and one tetradrachm (no. 779) of Seleucus. The transfer presents no problem, for ⋔ is probably an embellishment of the monogram found with Γ on *ESM* lion staters 272–275 assigned by Newell to Babylon, but more likely minted at Seleucia.[14] The reverse style coincides with that of Group D.

The second contribution involves a similar discovery by Charles Hersh; namely, that the obverse of a tretradrachm of Seleucus I, formerly in his collection and now in that of the American Numismatic Society, is identical with Newell's Obverse A28 under no. 26, again from Group D at Seleucia (PLATE V, 16). Whereas Newell's no. 26 denotes the controls AI, linked to Ψ by another common obverse; Hersh's Alexander (PLATE V, 17) carries ΣI, the same

[11] I am indebted to Dr. Georges Le Rider of the Cabinet des Médailles for supplying me with casts for Newell's no. 19 (A25–P74a) from Seleucia, and no. 783 (A19–P38) assigned to Carrhae.
[12] Cf. *ESM*, p. 23, no. 30; p. 24, nos. 31–32, 34.
[13] *ESM*, pp. 99–106, especially nos. 271–277.
[14] The reasons for this likelihood are presented in the forthcoming publication of the study of the mint at Babylon.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

lettering which appears on three tetradrachms assigned by Newell to Uncertain Mint C, and dated to the end of Seleucus' reign (*WSM* 1346–48: PLATE V, 18–20). All three were struck from the same obverse die and No. 18, with ΣΙ, bears the name of Seleucus. On Nos. 19–20 the obverse die not only has been recut, but also shows progressive breaks around the eye. The name of Antiochus appears on the reverse along with ΣΙ-Ɪ (No. 19) and ΣΙ-Ɨ (No. 20). Hersh would reattribute all three tetradrachms, quite rightly, to Seleucia on the Tigris. Neither the obverse head, nor the style of the figure on the reverse of No. 18 is foreign to Seleucia; but the execution of the type and legend on the reverse of Nos. 19 and 20 is almost barbaric in character.

Coins struck in the name of Antiochus I, and actually assigned by Newell to Seleucia as part of his first series, include two drachms with Zeus-Quadriga types, both struck from the same obverse (*ESM* 134–5). These bear the monogram Ⱥ which is used on a hemidrachm of Seleucus (*WSM Addenda*, 133A) and, in fact, continues through most of the coinage of Antiochus. It occurs during an issue of tetradrachms also assigned to the beginning of his reign (*ESM* 136: PLATE V, 21). This was a small issue, all coins having been struck from the same obverse die that reveals a somewhat debased style and progressive stages of wear.[15] Nevertheless, the spindly throne legs, the lean figure of Zeus depicted with formal curls, and the rendering of the drapery on the reverse of the specimen illustrated here, suggest the work of the diecutter who produced dies for Group D, of which PLATE V, 17 is an example.

All of the above tetradrachms struck in the name of Antiochus, as well as those of Seleucus to which they are linked, were issued from a common mint which can only have been Seleucia on the Tigris. That the coins of Antiochus follow in sequence the striking of Group D is proved by the continued use of increasingly worn obverse dies from this group. One might normally follow Newell, and place all in the first series of Antiochus' coinage after his father's death. However, such an arrangement would impose for Group D a date much lower than Newell's 302/01. It is disturbing first to

[15] *ESM* 136–139.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

find Groups D and E separated in terms of style and lettering from the last emissions of Babylon by his first three groups which reflect so clearly the hands of other artists. That they should now be separated by twenty-five years or more seems quite impossible. The only alternative is to concede that Antiochus did, in fact, strike coins in his own name while Seleucus lived.[16] The earliest possible date at which the name of Antiochus could appear would be 292 B.C., when he was appointed by his father as co-regent and viceroy of the East with Seleucia on the Tigris as his capital (Appian, *Syr* 59).[17] It seems only natural that Seleucus, having founded Antioch as his permanent capital, would permit in addition to the continuation of his own issues at Seleucia on the Tigris, coins with Alexander's types bearing his son's name, in the city that now served as the latter's administrative center. The continued use of worn anvil dies borrowed from the strikings of Seleucus, and the inferior workmanship of some of the reverses might well reflect the new appointment of Antiochus, and his need to employ whoever was available at the moment—men far less able than those working at the same time for Seleucus. Antiochus' own types would then have commenced immediately after his father's death, when he became sole ruler.[18]

If this conclusion is accepted, one must date Group D and the helmet issue shortly before 292, immediately preceding the Alexanders of Antiochus. It is probable that Group E either began Series I or was also contemporaneous with Group D; and that A, B, and C were struck, as were the tetradrachms of Antiochus, between 292 and 280. Some of the dies in these last three groups, Group A in particular, were apparently cut by new men whose work is first

[16] Newell (*WSM*, p. 50, n. 33) rejected this probability, except in the case of Bactra and a few similar eastern mints where the two names appear together on the same coins.

[17] For the date of this appointment see R. A. Parker and W. H. Dubberstein, *Babylonian Chronology 626 B.C. – A.D. 75*, *Brown University Studies* XIX (Providence, 1956), p. 21.

[18] The reattribution of tetradrachms discussed above brings into question Newell's dating to the beginning of Antiochus' sole reign of Alexander types with Antiochus' name assigned to other mints; namely, Ecbatana (*ESM* 508–515); Antioch (*WSM* 931–932); Apamea (*WSM* 1129–1131); Tarsus (*WSM* 1294); Sardes (*WSM* 1360–1362); and various uncertain mints (*WSM* 1288, 1349, 1629–1630).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

reflected on the obverse and reverse of PLATE IV, 10.[19] The only reconstruction that appears to bring common dies, lettering, and style into a plausible relationship is suggested by the chart on page 29, where obverse die links are indicated by solid lines. The revised sequence within Group D is presented in full, as dictated by the new material; but Newell's numbering is retained as it appears in his publications. Numbers in parentheses refer to the illustrations in the Plates.

As the new evidence almost certainly lowers Newell's absolute dates for Group D, this group and the helmet issue are separated in time further than might be expected from the latest emissions of Babylon. It does, however, allow for a more logical sequence, without intervening groups of different styles and lettering. The purpose of the Alexander coinage as a whole at Seleucia remains unclear. Groups A–C, now placed after E and D, were conceivably connected with the Battle of Corupedium in 281; but by that time the large Seleucid mint at Antioch had been operating for almost twenty years. Moreover, E and D (which together contained some small silver but neither gold nor bronze as yet) are so closely knit that they could hardly have started early enough to support Seleucus in his victory over Antigonus at Ipsus in 301, much less could they have marked the opening of the mint in 305. It seems more likely that this coinage was intended for trade with provinces west of Babylonia, which was undoubtedly bolstered by the elimination of Antigonus. Specimens of Series I occur primarily in hoards of western Asia, notably those of Ankara and Armenak (Noe 51 and 67). The presence in the Ankara Hoard of several specimens from this series determined Newell's dating of the deposit, which he set at ca. 295 B.C.[20] The hoard included specifically his no. 24, A25–P80b (PLATE IV, 9),

[19] Cf. this coin (*ESM* 19, A24–P72) with *ESM* 5 (A16–P47) from Group A, also compared by Newell in *ESM*, p. 21, bottom, but of course with the sequence in reverse. Here, the diecutter's stylistic digressions are displayed in the flourish of the pointed mantle end. General considerations of style should also place in Newell's Group A the specimen reproduced on PLATE V, 22, a recent acquisition in the ANS trays and not included, therefore, in his publications. It bears in left field the monogram  which appears partially erased beneath the throne.

[20] *ESM*, p. 23; and *WSM*, p. 42, n. 16.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Helmet Issue

ΒΑΣΙΛΕΩΣ
ΑΛΕΞΑΝΔΡΟΥ

		A26		Eagle	𐤀
		A26		Nike	𐤀 (or 𐤀)
1) 𐤀-ΝΟΥ		A26	A28	Nike	ΑΙ
2) 𐤀-Α/			A28	Nike	Σ|
3) 𐤀	46	—		Nike	Σ|
	47	—		Nike	Σ|-I
	48	—		Nike	Σ|-K

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

refle
reco
styl
whe
sequ
new
his
in th
As
date
time
Bab
out i
of th
Grou
with
Sele
years
silve
coul
victo
mark
coina
whic
Spec
nota
in th
Newe
hoar

[19] Cf.
also c
quenc
the flo
also p
recent
cation
benea
[20] *ES*

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

which now links the name of Antiochus to that of his father. The burial date must be lowered, therefore, at least to ca. 290 B.C. It was probably cached closer to 285, depending on the absolute dating for Groups A-C. The helmet series, while unrepresented in these particular hoards, does appear in the later Gejou Hoard from Mesopotamia, buried ca. 240–220 B.C. (Noe 680). It may have been merely another attempt by Seleucus to identify his own achievements with those of Alexander the Great, as suggested by Newell with regard to Group B;[21] it may in some way denote the successful effort of Seleucus to regain Cilicia from Demetrius Poliorcetes ca. 295/4;[22] or it may even have been struck to commemorate the new appointment of Antiochus. The latter's own relatively small issues were possibly nominal, themselves merely an announcement of his newly acquired status.

The long and prolific output of quadriga tetradrachms, on the other hand, constituted the principal coinage of Seleucus I at Seleucia, and apparently circulated almost entirely within the confines of Babylonia and Mesopotamia, as attested by the contents of the Haynes' Babylonian (Noe 118) and Gejou Hoards.[23] In my opinion, it inaugurated the output from this mint in 305, following Seleucus' brief invasion of India at about this time which ended in a compromise treaty. The type would seem more appropriate to Chandragupta's gift of 500 elephants[24] than to victory at Ipsus in 301.

Finally, the evidence as interpreted provides no coinage which would suggest a founding date for Seleucia on the Tigris before Seleucus assumed the royal title in 306/05.

[21] *ESM*, p. 20.
[22] Cf. K. J. Beloch, *Griechische Geschichte* IV, 2 (Berlin, 1927), pp. 355, 629.
[23] *ESM*, p. 51.
[24] Diodorus, XX.113.4; Strabo, XV.724.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE EARLIEST TRIOBOLS OF MEGALOPOLIS[1]

(PLATE VI)

JENNIFER WARREN

In his recent study of the triobols of Megalopolis[2]—the three groups of Zeus Lykaios/seated Pan triobols whose reverses are essentially distinguished by showing 1) Α and no eagle; 2) eagle; 3) ΜΕΓ and eagle; and the Achaean League triobols—James Dengate dated all four series to the second century B.C. and in his tentative chronology[3] suggested that the *no eagle* triobols could be put ca. 195–182 B.C. together with the earliest triobols with the eagle on the reverse (his Group I Period IIA). Further examination of the evidence, however, raises serious objections to such a late date for the *no eagle* triobols, and although there is no clear pointer to an exact date, it remains highly probable that they, unlike all the other seated Pan triobols, were struck before Megalopolis entered the Achaean League in 235 B.C.[4] If so, though there is no call to abandon the attribution of the *no eagle* triobols to the mint of Megalopolis,[5] properly they will rate as Arcadian League coinage (see below p. 39).

As Dengate observed,[6] the *no eagle* triobols are on a higher weight standard than the triobols of the eagle, ΜΕΓ, and Achaean League groups. The former, with a definite frequency table peak at 2.70–2.80 gr.,[7] are regular aeginetic triobols; the latter with individual peaks at around 2.35–2.40 gr.[8] are on the reduced aeginetic standard

[1] I am grateful to Michael Crawford and Martin Price for helpful criticism, and in particular to Martin Price for his comments on hoard material.

[2] *ANSMN* 13 (1967), pp. 57–110.

[3] *ANSMN* 13, p. 109.

[4] They were thus dated by Margaret Crosby and Emily Grace, *An Achaean League Hoard*, *NNM* 74 (New York, 1936), p. 29, and Margaret Thompson, "A Hoard of Greek Federal Silver," *Hesperia* 1939, p. 134. Margaret Thompson continues to consider it likely that they are earlier than the second century; see now p. 116, n. 1 in her publication of the Agrinion Hoard, *NNM* 159 (1968), which has appeared since this article was first written.

[5] Cf. *NNM* 74, pp. 12–13, n. 13; *Hesperia* 1939, p. 142.

[6] *ANSMN* 13, p. 99. [7] *ANSMN* 13, p. 98.

[8] *ANSMN* 13, pp. 98–99. Frequency peaks of individual groups: Group I, Per. IIA (eagle, miscellaneous control letters): 2.40 gr. (small group); Per.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

employed by the Achaean League and by Peloponnesian cities for their autonomous second century issues, e.g., Argos, Sicyon, Messene and Lacedaemon. Now the one *no eagle* triobol in the Western Greece hoard published by Margaret Thompson weighed only 2.43 gr. and was worn,[9] and there can be little question that the hoard was buried ca. 146 B.C., perhaps within the preceding decade. Yet for the same variant, with control letters I/I or I, 38 of the coins recorded by Dengate weighed 2.7 gr. or over, and only 7 under 2.7 gr.[10] That the Western Greece hoard triobol may have lost as much as .27–.37 gr. (10–13.7%) of its original weight implies intensive handling, lengthy circulation, or both, and raises the nagging doubt that the coin could hardly have been in circulation for so relatively short a time as the 50 years which Dengate's dating for the *no eagle* triobols would require.[11]

IIB (idem): 2.35 gr.; Per. III (eagle, no control letters): 2.40 gr.; Group II (Achaean League): 2.40 gr.; Group III (eagle and ΜΕΓ, with control letters): 2.35 gr.

[9] *Hesperia* 1939, p. 134, n. 144, and pl. III, 6; weight: p. 153.

[10] Issue 2: pp. 61–3, 88. That so few examples were of light weight suggests that certainly for this issue coins were struck to weight.

[11] Compare the loss of weight shown by the undoubtedly fourth century aeginetic triobols of Opuntian Locris (with ΟΓΟΝΤΙΩΝ: *BMCCent.Gce.*: ca. 369–338 B.C.) in the same hoard, nos. 60–68. In descending order the weights were: 2.64, 2.49, 2.40, 2.40, 2.39, 2.35, 2.32, 2.30, 2.18 grams. Weights of the ΟΓΟΝΤΙΩΝ triobols in *BMCCent.Gce.* (pp. 2–4, nos 9–13, 19, 24–26, 29) arranged in descending order, and converted to grams, are: 2.75, 2.72, 2.72, 2.66, 2.64, 2.64, 2.64, 2.56, 2.50, 2.40 grams. The ΟΓΟΝΤΙΩΝ triobols in the Arcadia 1929 hoard weighed 2.33, 2.33, 2.26, 2.13 grams (*NNM* 74, p. 32, nos. 214–218). To attempt to establish more accurately the weight at which these triobols were struck it would be necessary to compile a frequency table from as many unworn specimens as could be traced; but it is clear enough that all but one of these triobols in the Western Greece and Arcadia hoards have probably lost some .3 gr. or more through wear. Conversely it is interesting to consider the weights of the reduced aeginetic *drachms* of Elis in the hoard published by Schwabacher in *NC* 1939, pp. 238–265. They were struck from 23 obv. dies, 42 rev. dies, and fall into four groups. The hoard burial and the conclusion of the series have been dated ca. 191 B.C.; the beginning of the series is linked to the burial date of the 1922 Olympia hoard (*NNM* 39), which Newell put ca. 250/225 B.C., because that hoard contained drachms of Schwabacher's first group only, and in brilliant condition. In Schwabacher's hoard the four groups of drachms issued therefore (on Newell's dating) over a period of possibly up to 60 years, show progressive wear, yet the frequency table peak for the earliest group is only ca. .1 gr. lower than that for the latest group (ca. 4.8 gr.). On the probable correctness of Newell's dating of the 1922

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Again, in the Arcadia Hoard of 1929 the sole *no eagle* triobol (Dengate 17b) weighed only 2.39 gr.,[12] showing this time a weight loss of .31–.41 gr. from a presumed striking weight of 2.70–2.80 gr. It is true that for this issue only one out of the eight coins listed in Dengate's catalogue weighed over 2.7 gr.,[13] but comparison of the condition of four of the coins with their weight suggests that this particular issue can hardly have been struck to a weight far below the average striking weight for the whole group.[14] Emily Grace dated the burial of the hoard ca. 185–182 B.C.; Margaret Thompson has now argued that it should probably be twenty to twenty-five years later.[15] In any case, since the Arcadia Hoard contained Achaean League triobols of Elis, the burial date must be well after 191 B.C. when Elis joined the Achaean League.

It is true that the weights of the three *no eagle* triobols in the Agrinion hoard[16] are higher (2.76 gr., 2.74 gr., 2.54 gr., = Dengate 8b, 21b, 26a), but again it is the lowest weight of the three which is significant. For the single *no eagle* triobol in the Olympia hoard (Dengate 11a)[17] no weight is given, and there were none of the *no eagle* triobols in the Caserta hoard.[18]

This doubt as to the correctness of a second century dating for the *no eagle* triobols is confirmed by the Malamata-Kyparissia hoard from Dokimion in Acarnania.[19] The two Arcadian coins in this pot hoard (PLATE VI, A and B) were listed by Mme. Varoucha as "2 trioboles de la ligue arcadienne, l'un de 350–300 av. J.C., l'autre du commencement du IIIe. siècle: *BMC*, pl. xxxii. 11."[20] Both coins show a fair degree of wear and though as a result not all details are

Olympia hoard see below, n. 27. We must of course remember that rates of wear received by groups of coins in the same or different hoards may have been far from constant.

[12] *NNM* 74, p. 29, no. 161 (not illustrated).

[13] Issue 5, control mark ⊢P: *ANSMN* 13, p. 63.

[14] 2.74 gr.: very fine; 2.61 gr.: some wear; 2.56 gr.: very good; 2.48 gr.: fair to worn.

[15] *NNM* 159, p. 91.

[16] *NNM* 159, pp. 107–9: burial ca. 150 B.C. or ca. 135 B.C.

[17] *ANSMN* 13, pp. 63, 104–5.

[18] *ANSMN* 13, p. 106.

[19] Mme. Varoucha-Christodoulopoulou, Chronique des Fouilles, *BCH* 1956, p. 227, and pl. VI; not mentioned by Dengate.

[20] This is the *no eagle* type.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

clear, both are certainly of Dengate's Group I, Period I, the *no eagle* series.[21] The date of the hoard is not certain, but would appear to belong to the middle or later third century, and not to the second century.[22]

Three supporting arguments may be adduced for dating the *no eagle* triobols earlier than the second century. The following table shows the representation of the varieties of Megalopolitan triobols

[21] Both obverses show the form of moustache which characterizes the *no eagle* series (see below, p. 39). The first triobol (PLATE VI, A) has the monogram Φ clear on the reverse, and too close to the upraised arm for there to be space for an eagle. Letter or letters to right? Obverse may be from same die as *ANSMN* 13, pl. XX, 8b. The obverse of the second triobol (PLATE VI, B) is from the same die as *ANSMN* 13, pl. XX, 13a. The reverse shows the faint outline of the Φ to the l. It is just possible that X appears to the right of the rock. I am grateful to Martin Price for the photographs. Both he and I, independently inspecting the hoard some five years ago (for which our thanks to Mme. Varoucha), had noted the presence of the monogram without eagle, and wear. Martin Price rated both pieces "wear 4" on his scale from wear 1 (f.d.c) to 6 (heavily worn).
[22] Mme Varoucha (*BCH* 1956, p. 227) proposed the third quarter of the third century. Martin Price comments that he would have thought the whole uniform enough to make the deposit probably not later than 250 B.C. In addition to the 2 Arcadian (Megalopolitan) triobols, the hoard contained: Alexander-1 tetradr. (Noe, *The Alexander Coinage of Sicyon*, Group II, no. 23), 1 dr. (Sardis); Lysimachus-1 dr. (Thompson, "The Mints of Lysimachus," *Essays in Greek Coinage Presented to Stanley Robinson*, p. 170, no. 35: 299/8–297/6 B.C.); Ptolemy II-1 tetradr. (Svoronos 546; early in reign); Aetolia-1 triob. (obv. ΛΩ, early style, boar's hind leg forward); Locris-1 triob. (serpent in shield of Ajax, crest between legs; legend obscured, but must have been ΟΠΟΝΤΙΩΝ, so ca. 369–338 B.C., not 338–300 B.C.); Boeotia-1 dr. (shield/amphora); Chalcis-8 drs. (5 with no symbol, 3 with trophy); Aegina-1 st. (turtle), 1 triob. (turtle), 2 st. (tortoises), 1 dr. (tortoise/in incuse, AIΠI dolphin); Hermione-1 triob.; Sicyon-1 st. (wreath/N, ca. 330 B.C.), 1 dr. (5th cent.), 24 triobs. (4th–3rd cent.). (Additionally, a drachm of Chalcis with caduceus symbol, which was among some miscellaneous material in the same tray, was blackened like a number of coins in the hoard; if this belongs it brings the total up to 50.) Best preserved were the Ptolemy tetradr. (Martin Price: w1–2), and the Sicyon stater; the two Alexander coins and the Lysimachus dr. showed some wear (M. Price: w3, w3, w2–3 respectively). However, the Aetolia dr. (conventionally dated after 279 B.C.) is considerably worn (see *BCH* 1956, pl. VI, 8), and the wear and weight-loss of the Sicyon triobols (of which most varieties are represented in the hoard) seemed to me fairly comparable to the wear and weight-loss of those in second century hoards. Even if, conceivably, the date of the Malamata-Kyparissia hoard should have to be dropped down to the early second century, the wear of the two Arcadian triobols ensures their dating to the third century at least.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

in the second century hoards as analysed by Dengate, and the number of obverse and reverse dies which he identified for each group.[23]

	Agrinion	*Olympia 1939*	*W. Greece*	*Arcadia*	*Caserta*	*Obverse dies*	*Reverse dies*
Group I Period I (no eagle)	3	1	1	1	–	27/	45
Period IIA (misc. controls)	11	5	1	–	–	7/	12
Period IIB (Δ, ΛΔ controls)	103	19	43	30	9	35/	150
Period III (no controls)	34	4	16	5	3	8/	21
Group II (Achaean League)	56	12	28	11	5	6/	46
Group III (ΜΕΓ)	–	19	1	–	9	74/	120

Given the relatively large number of known dies of the *no eagle* triobols, their representation in the hoards is remarkably low. A possible explanation could be that they were struck considerably earlier than the suceeding issues, and that fewer of them were still in circulation when the hoards were buried.

Another argument may be drawn from the unreduced weight standard of the *no eagle* triobols, for it seems improbable that Megalopolis would have struck on this standard if neighboring mints were already issuing coins of reduced weight. The reduction of the weight standard is interesting and deserves further study. The uniformity of the Achaean League coinage which Polybius asserted[24] plainly refers to the coin types, but it must further mean a common weight standard for federal issues adopted by the League. If this is not actually implied by Polybius' mention of the coinage in the same phrase as the uniformity of weights and measures, it is only to be expected, since the federal issues must have been struck primarily to maintain the federal army. Unfortunately we do not know when (or even that) such a decree was passed by the League. Undoubtedly EmilyGrace's view was right that the first issues must be dated several

[23] *ANSMN* 13, pp. 104–6 (hoards), pp. 89–97 (die statistics).
[24] II.37. 10–11.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

decades after the ceiling date of 280 B.C. when the League was reconstituted,[25] and Margaret Thompson has now demonstrated the likelihood that the coinage did not start until after 196 B.C.[26] But earlier evidence for the reduction of the aeginetic standard can be found in the coinage of Elis whose prolific series of Achaean League varieties presumably started relatively soon after she entered the League in 191 B.C. But Elis was already using the reduced aeginetic standard for her series of drachms (eagle holding hare / FA thunderbolt) which the evidence of the 1922 Olympia hoard points to having started in the latter half of the third century, and probably in the third quarter at that.[27] Yet the same hoard surely shows that Elis was striking autonomous triobols of reduced weight even earlier than the reduced drachms,[28] so that even on a conservative estimate it would not be unreasonable to suppose that coins were already being struck in the Peloponnese on the reduced aeginetic standard at a date not much later than the 220's. The unreduced triobols of Megalopolis should surely be earlier than this date for the proximity of Megalopolis to Olympia, if not to Elis, suggests that she could hardly have ignored

[25] *NNM* 74, pp. 19–20.

[26] *NNM* 159, p. 90. The small series of anepigraphic League triobols is of course earlier (see *NNM* 159, p. 85); their weight is not reduced.

[27] *NNM* 39, see above p. 32, n. 11. The slightly worn Gaza tetradrachm of Ptolemy II dated 254/3 B.C. securely places the burial of the hoard in the second half of the third cent. Martin Price, for whose comments on the regal issues I am grateful, believes that Newell's dating to before 225 B.C. remains fairly certain, and that the hoard might have been deposited as early as ca. 240 B.C. We must remember however that the hoard may not be complete (*NNM* 39, pp. 1, 2, 24). Of course, since the start of the Athenian New Style tetradrachms (Margaret Thompson, *The New Style Silver Coinage of Athens*) and, as I hope to show elsewhere, the Sicyon triobols with Σ reverse are both to be downdated to the second century, their absence from the 1922 Olympia hoard is no longer so relevant to the assessment of its date (cf. Newell, *NNM* 39, p. 22). Incidentally, the latest Elis staters (Seltman, *Temple Coins of Olympia*, Group L) must also date before 191 B.C.

[28] *NNM* 39. Six reduced drachms (of Schwabacher's first group only) were v.f. or brilliant; almost as well preserved were the *latest* of three groups of reduced triobols (Zeus head/FA eagle on Ionic capital, A: 7 examples,worn to good; Zeus head r./FA thunderbolt in wreath: 4 examples, somewhat worn to very fine; similar, but more and smaller leaves in wreath: 7 examples, mostly very fine.) It is therefore possible that Elis assimilated the weight of her triobols to that of the triobols of the Aetolians, with whom she was allied in the third century.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

this reduction of what was pre-eminently the Peloponnesian weight standard.

Finally, there is a further and important point of difference between the *no eagle* Megalopolitan triobols and the issues with the eagle or the eagle and ΜΕΓ. Only for the *no eagle* triobols is there a series of corresponding obols (head of Pan/Ⱥ and syrinx).[29] Four control marks are common to both triobols and obols: I/I (and I), Μ, Δ, and ΝΩ.[30] But certainly by the second century, and apparently by the second half of the third, silver obols and other fractions of the triobol ceased to be struck in the Peloponnese:[31] small silver coinage was replaced by bronze. It would be extraordinary if these Arcadian obols, most of which are contemporary with *no eagle* triobols, were an exception.

One of Dengate's two reasons for dating all the Zeus head/seated Pan triobols, including those with no eagle, to the second century, is the absence of Megalopolitan triobols from the Olympia 1922 hoard (see above p. 32, n. 11) in contrast to the second century Olympia 1939 hoard in which there were 60.[32] In fact, only one of the 60 was a *no eagle* triobol and, with regard to the Olympia 1922 hoard, it is not too surprising that there should have been none of the Megalopolitan triobols. Apart from the 31 coins of Elis, 1) two-thirds of the remainder (33 out of 51) were staters or tetradrachms,[33] 2) about half

[29] *BMCPelop.* p. 174, nos. 55–61; not mentioned by Dengate. The syrinx appears on some issues of the *no eagle* triobols, propped against the rock.

[30] Obol with Μ: McClean 6934, pl. 234, 18; with ΝΩ: McClean 6935, pl. 234, 19. Three of the *no eagle* triobol issues have control letters not found on the obols, and apart from the obols with no control letters there are three rare obol issues with control letters not found on the triobols. These observations are based on coins in the BM trays and photographic collection and in published collections; a wider search might extend the list of control letters common to both denominations. The fact that as many as four sets (including the unusual ΝΩ) are common to both effectively rules out the possibility of coincidence, nor is the repetition of the same control marks at a later date at all probable. So far as dissimilar types can be compared style seems to offer no difficulty.

[31] At any rate so far as I know there is no Peloponnesian fraction which can be dated with certainly after ca. 250 B.C. For Argos the latest group of obols and trihemiobols occurs in the Mycenae hoard (Noe 716) which contains, as G. K. Jenkins has pointed out to me, two tetradrachms of Ptol. II (not Ptol. I) and may have been put away ca. 250 B.C.

[32] *ANSMN* 13, p. 107.

[33] Hoards often exhibit, or tend toward, homogeneity in size of unit.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

that remainder (28 out of 51) were regal issues (Alexander, Lysimachus, Ptolemy I and II), and 3) the not immediately local Peloponnesian coinages—staters and drachms of Aegina and staters of Sicyon—are known to have enjoyed a wide circulation in mainland Greece. In short, apart from its Elis content the flavor of this hoard is not that of a local one;[34] and in any case it is far from certain that the hoard was complete.[35]

Dengate's other argument for dating all Zeus head/seated Pan triobols, including those with no eagle, to the second century is drawn from a "comparison of the condition of the earliest Megalopolis strikings of the catalogue and the earliest Achaean issues of Elis, because the two coinages appear together in a number of hoards. The Elis coins cannot have been struck before 191 B.C. when Elis was joined to the Achaean League and few, if any, of the Megalopolis triobols show more wear than the Elis coins".[36] On the evidence of the Agrinion Hoard, this conclusion might seem justified;[37] however, as we saw above (p. 32), the single *no eagle* triobol in the Western Greece hoard is visibly worn, while even the earliest Achaean League triobols of Elis illustrated are in better condition.[38] Of the 12 Achaean League triobols of Elis in the Arcadia hoard the 5 illustrated do not show much wear;[39] the single *no eagle* Megalopolis triobol is not illustrated, but as noted above it may be presumed to have lost weight and therefore to be worn. I have not been able to compare the wear of the two groups of coins in the Olympia 1939 hoard; there were no *no eagle* triobols in the Caserta hoard.[40]

[34] Similarly the Sparta 1908 hoard (Noe 1004; 86 Ⱥ) and the Epidaurus 1903 hoard (Noe 392; 61 Ⱥ), both third century, contained in addition to regal and Athenian coins only immediately local issues (7 Lacedaemon and 4 Epidaurus respectively). It should be emphasized that unlike these and other third century Peloponnesian hoards such as the Patras and Sophikon hoards (Noe 795, 997), the second century hoards of the Peloponnese and N. W. Greece contain quite sizable quantities of hemidrachms of, e.g., Sicyon, Argos, Locris, and drachms of Chalcis which had continued in circulation from the 4th/3rd centuries. Similarly the *no eagle* triobols of Megalopolis. (On the third century Peloponnesian hoards and coin circulation see now T. Hackens' interesting discussion, *Studia Hellenistica* 16 [1968], pp. 69–95).

[35] *NNM* 39, pp. 1, 2, 24. [36] *ANSMN* 13, p. 107.

[37] Compare *NNM* 159, pl. XV, 199–201 with pl. XXVII, 330–pl. XXIX, 353.

[38] *Hesperia* 1939, p. 128, pl. VIII, 14 ff.

[39] *NNM* 74, pl. I, nos. 15–22. [40] *ANSMN* 13, pp. 104–6.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Although, as Dengate observed,[41] the die cutters of the *no eagle* triobols were relatively careful craftsmen, it is not altogether easy to distinguish between the style and fabric of the *no eagle* triobols and that of the earlier issues, at any rate, of the triobols with eagles, though the style of the MEΓ triobols is degenerate and their fabric spread. However the treatment of one detail characterizes the *no eagle* triobols: consistently the moustache appears in roughly the shape of a weak S, which was the widespread (or standard?) form in use in the fourth century, while on the eagle and eagle with MEΓ triobols it is crescent-shaped, the common (or standard?) form in the second century.[42]

It is less easy to make a positive assertion about the dating of the *no eagle* triobols. The style, certainly, requires a later date than that of the aeginetic staters with the same types (*BMC Pelop.* pl. XXXII, 10) struck probably in the 360's or soon after, and the seated Pan of the reverse is significantly different (on the staters the head is frontal, the rock larger, and the lagobolon is held in the other hand and the other way up). Cognizance must also be taken of the third century Alexander type tetradrachms of Megalopolis, with ΜΕ and syrinx (and no control letters in common with the *no eagle* triobols).[43] At any rate the probability is very high that the *no eagle* triobols were issued at some time during the period running from the later fourth century down to 235 B.C., for which the evidence of the continued existence of the Arcadian League otherwise consists of the use of the Arcadian ethnic in inscriptions.[44] When Megalopolis again struck triobols with the same types (but with the addition of the eagle) in the second century, she perhaps used these types for her municipal series primarily because they were what she had used before

[41] *ANSMN* 13, p. 100.
[42] As on the coins of the Achaean and Thessalian Leagues. The crescent-shaped moustache appears already on tetradrachms of Antigonus Doson, 229–221 B.C.
[43] See Noe, *ANSMN* 10, pp. 39–41. Noe tentatively dated the tetradrachms to the period between the tyrannies of Aristodemos and Lydiadas, 251–244 B.C., or alternatively to the tyranny of Lydiadas, 244–235 B.C., assuming that he had Macedonian support. Dengate (p. 59, n. 13) prefers the latter alternative as being consistent with the amount of wear shown by coins in the Sophikon, Megalopolis and Corinth 1938 hoards.
[44] Tarn, *CR* 1925, pp. 105–7; but see M. Sordi, *BCH* 1957, p. 38, n. 5.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

she had joined the Achaean League.[45] The AP or AP monogram appears on only two issues with the eagle, and according to Dengate's arrangement not even on the earliest (though one, certainly, is an exceptionally large issue).[46] It may be that in her revival of the Arcadian ethnic used in conjunction with the federal coin types Megalopolis was being cautious—or half-hearted—in proclaiming her leadership of Arcadia.[47] But we cannot wholly exclude the alternative possibility that those monograms instead represent individuals with names beginning Ἀρ-, Ἀρκ- who exploited the ambiguity by placing their control mark to the left of the type where the federal monogram had stood.[48]

[45] As Argos did. Cf. Margaret Thompson, *Hesperia* 1939, p. 143.
[46] See *ANSMN* 13, pp. 89–93. And on one issue with ΜΕΓ and eagle, *ANSMN* 13, p. 96.
[47] See Dengate, *ANSMN* 13, p. 108.
[48] Unless AP is a grossly careless form, or stands for Ἀρ[καδικὸν] ἔ[θνος], it is difficult to see how it can be resolved as the Arcadian ethnic. Names starting Ἀρ- are remarkably common; moreover Polybius (28.6.2) mentions two Megalopolitans, Arkesilaos and Ariston, who, appropriately, were active at the time of the war with Perseus.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE FOURTH CENTURY ORIGIN OF ROMAN DIDRACHMS

(PLATE VI)

RICHARD E. MITCHELL

On the question of the dating of Rome's earliest silver coins, the Romano-Campanian didrachms, scholars are generally divided into three categories, depending upon whether they advocate an early, middle, or late chronology. Specifically, the earliest coins are variously attributed to the period between 326 and 269 B.C. The early and late chronologies were best argued by Laura Breglia and Harold Mattingly respectively, while Rudi Thomsen recently presented the case for a middle chronology most forcefully.[1] Although Thomsen's work has not gained total acceptance, it has been most favorably received, and the publication of this three-volume work, *Early Roman Coinage*, has met with widespread enthusiasm and the attendant hope that the problem would at last be solved. However, I hope to show by a re-evaluation of the evidence that good reason still exists to prefer an earlier chronology.

The controversy concerning the dating of Rome's earliest coins is part of a larger problem concerning the development of the Roman state. Many scholars argue that Rome wanted only to secure her own frontiers or to protect weaker states against their stronger enemies and contend that, for this reason, Rome was hesitant to form a policy for all Italy and completely lacked a Mediterranean outlook until well into the third century.[2] However, the evidence suggests that Rome was eager to play an active role in Italian affairs and that she even possessed a rudimentary Mediterranean policy in the late fourth

[1] Laura Breglia, *La prima fase della coniazione romana dell'argento* (Rome, 1952); Harold Mattingly, "The First Age of Roman Coinage," *JRS* 35 (1945), pp. 65–77; Rudi Thomsen, *Early Roman Coinage*, 3 vols. (Copenhagen, 1957–61). Although the chronology I offer differs in many respects from the positions taken by the above scholars, my debt to them will be obvious.

[2] For example, H. Mattingly, "'Aes and Pecunia'," *NC* 1943, p. 28, "Rome may have been, in everything but military efficiency, a backward and unenterprising state."

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

century. For instance, when considered together and not thrown out as annalistic interpolations, Roman treaties with Carthage, Tarentum, and Neapolis; her growing fleet of ships; the foundation of such colonies as Luceria and Pontia; the construction of the Via Appia; her association with Rhodes; and the fact that Rome was constantly engaged in extending her sphere of influence by military and diplomatic means from ca. 340 to 300 all imply that in the last half of the fourth century Roman expansion was continuous, if not planned, and that her sphere of interest was constantly increasing.

Yet numismatists generally have claimed that Rome conquered almost the whole of Italy and became the most powerful state in the western Mediterranean before she minted coins in her own name. To mention only two of the most influential advocates of a later chronology, Thomsen and Mattingly insisted that the *terminus post quem* for the earliest coins could not be pushed back into the fourth century. On the other hand, Tenney Frank has observed that, numismatic arguments aside, the historical [literary] evidence points to the Second Samnite War (326–304) as the latest possible date for the introduction of Rome's first didrachms and that any later attribution "goes beyond belief."[3]

Numismatists and historians both agree that Roman contacts with important coin-using and coin-producing states in the South, especially with Greek states, fostered Rome's own coins and greatly influenced them in matters of type, style, and weight. Neapolis, Metapontum, Thurii, Syracuse and Carthage are but a few of the states frequently cited. Literary evidence indicates that Rome established permanent contacts with such states in the last quarter of the fourth century. Rome's movement south was continuous from about 340 and I hope to show that the development of Roman coinage is inextricably linked to Roman expansion—that Roman coins advanced with the Roman legions.[4] But the coins were not only issued to sustain her armies in the field, they were also designed to

[3] T. Frank, *An Economic Survey of Ancient Rome*, I (Baltimore, 1933), pp. 42–3.
[4] The idea that the Romano-Campanian coins were military issues struck in South Italy for use in that area is not new. Ernest Babelon, *Descriptions historique et chronologique des monnaies de la république romaine*, I (Paris, 1885), pp. xxixff., advanced this theory sometime ago.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

bring Roman influence to bear on the most commercially vital sections of Italy. By issuing coins in her own name, Rome would be taking part in a propaganda war to win influence among the coin-using states of Italy.[5]

The Numismatic Evidence

The ROMANO-inscribed didrachm, *Obv.*: Mars head, bearded, wearing helmet with a crest, l.; *Rev.*: Horse's head, r., with grain ear symbol (PLATE VI, 1, ANS) is the first silver coin issued in the name of Rome.[6] Not only is the average weight of this coin the heaviest among the didrachms issued,[7] but as shown below (pp. 54f.), the priority of the coin is borne out by the hoard evidence. Moreover, H. Küthmann has shown that it is the only didrachm which does not have a circle of pearls around the head on the obverse.[8]

Since this coin is first in the series of ROMANO issues, its prototype may be used to establish a *terminus post quem* for the series. The prototype is usually thought to be the Leucippus head, bearded, wearing helmet, pictured on Metapontine coins. There are several varieties of this coin type, and each scholar is wont to select the particular variety of Leucippus head which best fits his theory. A case in point is the Leucippus head wearing a crested helmet, with triskeles symbol on the reverse in addition to the standard grain ear type (PLATE VI, 2, ANS). The triskeles was the particular badge of Agathocles, tyrant and King of Syracuse from 317 to 289, and C. T. Seltman has argued that this coin belongs to a period in Metapontum's history, after 304, when Agathocles controlled some cities along the

[5] For a similar view see A. Sambon, *Les monnaies antiques de l'Italie* (Paris, 1903), pp. 421ff.

[6] Scholars generally agree that the first didrachms issued were those with the ROMANO legend and that the ROMA-inscribed coins are later. In addition, following the arguments advanced by Breglia, op. cit., pp. 15ff., and Thomsen, III, pp. 54ff., it seems clear that the ROMANO (and the ROMA) didrachms were issued in sequence, the heaviest first, followed by issues which show a gradual reduction in weight, and were not struck as Mattingly maintained, *JRS* 1945, pp. 66ff., in four different mints at the same time beginning in 269.

[7] See below, p. 53.

[8] H. Küthmann, "Zur römischen-campanischen Didrachmenprägung," *Jahrbuch für Numismatik und Geldgeschichte* IX (1958), p. 93.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Southern shore of Italy.[9] To reinforce his argument, Seltman cited Diodorus,[10] who said that Cleonymus, the Spartan hired by Tarentum to wage war against her enemies, contemplated freeing Syracuse from Agathocles' control and that Cleonymus attacked Metapontum because the city had not come over to him. Seltman deduced from this that Agathocles controlled Metapontum. Using this argument, Küthmann stressed the stylistic similarities between the first Roman didrachm and the Metapontine coin with triskeles symbol and concluded that the former must be an imitation of the latter, since both types show the bearded head of a man wearing a crested helmet and such features as the beard, nose, and mouth are treated in the same manner on both coins. Likewise, the ear of grain which appears on the reverse of the Metapontine coins is found behind the horse's head on the reverse of the ROMANO didrachm. Thus Küthmann held that the Roman coin must be dated during or after the time of the Metapontine issue of Agathocles and that the *terminus post quem* for the bearded Mars coinage must be ca. 300.[11] Thomsen accepted this date as fixed in his treatment of the chronological limits of the Romano-Campanian didrachms.[12] This led him to the same conclusion once held by Mattingly, that the first Romano-Campanian coins were issued as a result of the Romano-Carthaginian alliance concluded during the Pyrrhic War (ca. 280), a fact which Thomsen said is indicated by the horse's head on the reverse of the Roman coins. The same type figures prominently on Carthaginian coins, and Thomsen believed that its reproduction on Roman coins reflects the financial assistance given to Rome by the Carthaginians during the war.[13] However, the basis for this chronology, the close stylistic similarity between the Metapontine coin with the triskeles symbol and the bearded Mars head coinage, is open to doubt. If the two issues are as similar as Küthmann and Thomsen maintained, they ought to resemble one another in detail, but they do not. Although the general

[9] C. T. Seltman, "The Influence of Agathocles on the Coinage of Magna Graecia," *NC* 1912, pp. 2–3, 6–8.
[10] Diodorus, XX. 104.
[11] Küthmann, pp. 87–89.
[12] Thomsen, III, p. 95.
[13] Thomsen, III, pp. 92, 153–157. Cf. H. Mattingly, "The Romano-Campanian Coinage and the Pyrrhic War," *NC* 1924, pp. 181–209.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

features are similar on both coins, the helmet on the Roman coin has a flap, a neck guard, while the Metapontine coin does not. Moreover, the latter coin has an entirely different kind of crest: it joins the helmet in one small area while the crest on the Roman coins is attached along the entire back of the helmet. Furthermore, the Metapontine coin has a wreath on the helmet, but the Roman coin does not. Küthmann's statement that the beard on both coins is treated in the same manner may also be questioned. A study of the coins from a dozen or so different museums makes it clear that the Mars head has a beard of long, curly strands of hair with very noticeable loose ends. On the Metapontine coin in question, the beard is composed of tight little balls of hair, not at all flowing and loose like that on the Roman type.

It is generally accepted among scholars that the Leucippus type is ultimately derived from the Archias head depicted on Syracusan bronze coins attributed to Timoleon (345–336—PLATE VI, 3, ANS).[14] The literary evidence shows that Timoleon was active in Metapontum before he went to Sicily,[15] and his subsequent success and behavior made him a popular figure among western Greeks. Metapontum, borrowing the Archias type, at first reproduced it faithfully, and only gradually modified the style until the last coins were issued with the Leucippus head wearing a crested helmet and with the triskeles symbol.[16] There is an earlier Metapontine coin which although it does not have a crest on the helmet, has many features in common with the bearded Mars coinage (PLATE VI, 4, BM). The neck guard is exactly the same, the helmet does not have a wreath, and the beard is treated in a fashion similar to the beard on the Roman coin. This coin is an extremely close parallel to the Archias head on Timoleon's bronze coins. Thus the Roman coin may be seen to more closely approximate the Syracusan coin of about 340 and the Metapontine coin which was copied directly from it presumably about

[14] Seltman, *NC* 1912, p. 7, n. 17; Thomsen, III, pp. 94–5, cf. fig. 9; and Breglia, pp. 13, 31. Breglia pointed out the obvious Sicilian character of many of the Romano-Campanian coin types, but see Thomsen's discussion, III, pp. 91 ff.

[15] Diodorus, XVI. 66. 5.

[16] Arthur J. Evans, "A Recent Find of Magna Graecian Coins of Metapontum, Tarentum, and Heraclea," *NC* 1918, pp. 143 ff.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the same time. However, it is evident from this discussion that no exact parallel exists as yet for the first Romano-Campanian coin. Just as the last Leucippus type issued by Metapontum modified the style originally borrowed from a Syracusan coin, so the Roman coin is a modification of the general type and not a direct copy of any known specimen. Die cutters obviously used great imagination and ingenuity in reproducing types borrowed from other cities. In the absence of an exact stylistic parallel, the most that can be said is that the *terminus post quem* for the bearded Mars issue is based upon the Archias and Leucippus types and thus ought to be ca. 340–330.

It can not be argued that Rome could not have come into contact with Syracusan or Metapontine types so early because the Roman treaty with Carthage concluded in 348 presupposes the existence of Roman mercantile activity in Sicily, however insignificant that activity may have been.[17] Sicily was not unknown to the more northerly peoples of Italy: Etruscan, Celtic, Samnite, and Campanian mercenaries had been employed there for years.[18] As for Metapontum, Rome signed a treaty with Alexander, King of Epirus, in 332, and the latter had his principal base at Metapontum.[19] Moreover, after her treaty with Neapolis in 326, Rome has a close tie with one of the chief emporia of Italy and her experienced mint, as well as ready-made contacts with other states of South Italy and Sicily and their coins.

The evidence from the reverse type of the Mars coinage, the horse's head, is even less conclusive than that from the obverse. Once the

[17] Thomsen, III, pp. 93–4, said that Rome could not have copied the Archias type because the coin was bronze and thus intended for local use and "Rome does not seem to have had any contact with Sicily in the period when the Timoleon coin circulated." Thomsen disregarded those Romano-Carthaginian treaties which are certainly of fourth century date or earlier (Polybius, III. 22–24). There is also the case of a certain Postumius who was put to death by Timoleon when he sailed into Syracuse thinking the city friendly (Diodorus, XVI. 82. 3). Diodorus identified Postumius as an Etruscan but both G. Forrest, *JRS* 46 (1956), p. 170, and Filippo Cassola, *I gruppi politici romani nel III secolo A.C.* (Trieste, 1962), p. 28, think that Postumius was a Roman.

[18] Diodorus, XIX. 106, XX. 11. 1, XX. 64. 2; Polybius, I. 7. 2, I. 8. 1; Dionysius, XX. 4. 8; are just a few of the many references to Italian mercenaries in Sicily.

[19] Justin, XII. 2. 12; Livy, VIII. 17. 10. Cf. Arthur J. Evans, "The 'Horsemen' of Tarentum," *NC* 1889, p. 81.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

terminus post quem of 300 has been removed for the obverse type, there is no reason why Rome could not have copied the horse's head type from Carthage on any number of occasions earlier than 300. The Romano-Carthaginian treaties of 348 and 306 have already been suggested as possible occasions on which the Romans borrowed the horse's head type.[20] Indeed, so far we have only assumed that the horse's head was Carthaginian-inspired; however, there is no unanimity on this point. The Roman and Carthaginian coins do not resemble one another in specific detail: the Carthaginian coins depict a free horse while the Roman coin pictures a bridled horse. The bridled horse ought to refer to equestrian activity of some sort. Sir William Ridgeway asserted that the horse's head should be linked with the obverse type itself, the bearded Mars, both representing the *Equiria*, the ancient horse race in honor of Mars.[21] One of the victorious pair of horses was sacrificed to Mars, and its head was cut off and contested for by the men of Subura and the Sacra Via, the winning side fixing the head to either the turria Mamilia or the Regia.[22] Breglia added to this the evidence that both the horse and Mars were intimately connected with war.[23] She based her argument mainly on Polybius' statement that the Romans were accustomed to sacrifice a horse before going to war.[24] The existence of a direct

[20] Ernst Assmann, "Moneta," *Klio* 6 (1906), pp. 477–488, argued that when Camillus built the temple of Juno Moneta in 345 (Livy, VII. 28), he was commemorating the monetary assistance given by the Carthaginians under the terms of the treaty of 348. Juno was in fact Astarte. A. W. Hands, "Juno Moneta," *NC* 1910, pp. 1–12, showed how unlikely Assmann's position was. Originally, Edward A. Sydenham, *Aes Grave* (London, 1926), p. 55, accepted the Carthaginian inspiration for the Roman horse's head type, suggesting it was issued in 306 when the Romans and Carthaginians signed another treaty.

[21] Sir William Ridgeway, *Proceedings of the Cambridge Philological Society*, CXXX–CXXXII (1925), pp. 26–28. In the same publication (pp. 23–24), H. Mattingly criticized Ridgeway because he only explained the significance of the horse type to the Romans: his explanation "throws no light on their origin." But Mattingly missed the point. Even if the type was borrowed from Carthage, which is unlikely, it was so closely associated with its own obverse that it could have been employed at any time in connection with the *Equiria*. Rome certainly did not employ the type to publicize Carthage.

[22] Festus, 71. 117L; Plutarch, *Quaestiones Romanae* XCVII; Ovid, *Fasti* II. 859, III. 519.

[23] Breglia, p. 31.

[24] Polybius, XII. 4

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

relationship between the Mars and the horse's head types supports the conclusion that the first ROMANO didrachm was a military issue. In turn, Breglia's conclusion that the coins were struck about 320 is strengthened, since the great war against the Samnites had recently begun and Rome could derive both economic and propaganda benefits by issuing money in her own name. Moreover, as a result of the recent *foedus* with Neapolis, Rome had an experienced mint to assist her.[25]

The bronze half-litra coin inscribed ROMANO, with types Minerva head wearing helmet with a crest/horse's head, is usually associated with the first silver didrachms (PLATE VI, 5, ANS).[26] This coin is found overstruck on a Syracusan bronze coin, Zeus Hellanios/eagle on thunderbold.[27] In turn, the Zeus Hellanios coin has been found overstruck on coins of Agathocles (317–289) as well as on a Persephone/biga coin. Charles Hersh associated the latter coin with both bronze and gold coins of Hiketas (288–278). He concluded that the Zeus Hellanios coin was issued in the later years of Hiketas' reign (282–278), or just after his expulsion. Hersh's opinion was that the overstrike is most important for the establishment of chronology because, "First, it shows the 'conservative' initial date of the 'Romano-Campanian' coinage to be utterly wrong, as a coin of 342, or shortly thereafter, cannot be struck *on* a coin issued some sixty years later; second, it makes the 269/68 date given by the 'progressive' Mattingly-Robinson school seem very plausible as there is nothing startling about a coin issued in the 270's being overstruck during the 260's."[28] Thus Hersh dated both the Persephone and the Zeus Hella-

[25] Breglia, pp. 28–30. Furthermore, I cannot believe that Carthage supplied Rome with the wherewithal to issue her first didrachms. The two states had grown suspicious of one another and, what is more, Polybius, III. 25. 4 specifically states that one of the conditions in the treaty made at the time of Pyrrhus' Italian adventures was that each side was to pay its own men. Such a clause would not have been included if the Carthaginians were in fact underwriting the first Roman silver coinage.

[26] Sambon, *Monnaies antiques*, pp. 438ff.; Edward A. Sydenham, *The Roman Republican Coinage* (London, 1952), pp. xvii, 1, pl. 13, 3; Thomsen, I, pp. 51, figs. 12–13, 52.

[27] Charles Hersh, "Overstrikes as Evidence for the History of Roman Republican Coinage," *NC* 1953, p. 45, pl. V, 19.

[28] Hersh, *NC* 1953, pl. 45.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

nios Syracusan bronze coins to Hiketas' reign, placing the latter coin after 282. However, this is not the only possibility. In a recent article, Ross Holloway pointed out that Zeus Hellanios coins were found at Gela, which was destroyed about 282.[29] Thus with good reason, Holloway assigned the Persphone coinage to the brief post-Agathoclean democratic government which ruled before Hiketas. The coins were later used as flans for the Zeus Hellanios coinage, which Holloway has attributed to Hiketas, but not confined to his later years. Thus the *terminus post quem* for the undertype of the Minerva/horse's head overstrike is about 288. Thomsen, who did not have Holloway's evidence at his disposal, had earlier suggested a similar date of 289–288 as a compromise between those who dated the Syracusan coins to the Agathoclean period and those who assigned them to Hiketas. Thomsen incorrectly argued from this that a *terminus post quem* (289–288) had also been established for the Minerva/horse's head.[30] However, there is nothing to prohibit the coin from being in circulation before as well as after this date. In fact, since there is a large number of extant specimens of this coin, Breglia concluded that it must have been issued together with all the ROMANO didrachms in general and not struck for the duration of the bearded Mars coin alone.[31] Küthmann's work can be used to support Breglia's argument in part, since he showed that the equally copious issue of bronze litra coins inscribed ROMANO, which were once thought to have types of Apollo head/lion, and thus considered the companion issue of the second ROMANO didrachm, Apollo head/prancing horse, actually pictured a goddess head/lion.[32] Thomsen reasoned from this

[29] R. Holloway, "Eagle and Fulmen on the Coins of Syracuse," *RBN* 1962, pp. 11–12. It would not surprise me if the Persephone/biga coinage eventually proved to be Agathoclean, since the Persephone head is pictured on coins definitely attributed to Agathocles.

[30] Thomsen, III, pp. 102–103.

[31] Breglia, pp. 34–35. The Vicarello and Carsoli hoards contain 916 and 153 specimens of this coin respectively: cf. Thomsen, I, pp. 118–119.

[32] Küthmann, pp. 96–97, pl. II, 8. Sydenham, *RRC*, pp. xvii, 1, pl. 13, 5, thought the obverse type was Apollo and associated the coin with the second ROMANO didrachm, Apollo/horse. Mattingly, *JRS* 1945, p. 66, associated the coin with the third ROMANO didrachm, Hercules/She-wolf. See also H. Mattingly, "Nummus und As," *Schweizerische Numismatische Rundschau* XXXIII (1947), p. 7, n. 6.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

that the Minerva half-litra coins were issued together with the first two didrachms only and not for as long as Breglia suggested.[33] However, the number of extant coins indicates that both the litra and half-litra bronze coins might well have extended over a long period of time. The Minerva coin obviously went through several issues and is found both with types left and right and with a star symbol. In addition, some specimens of this coin have a circle of pearls around the head on the obverse while others do not. One merely has to look at the great variation in the manner in which the ROMANO is inscribed to realize one is dealing with a very large group of coins.[34] Moreover, the hoard evidence does not give priority to either the litra or half-litra coin.[35] Thus it would seem natural to view them as parallel coinage of a half and whole unit issued together right from the start, coins of different denominations intended to expedite economic activity. Therefore, I cannot accept Thomsen's conclusion that the Minerva series was discontinued after the goddess head/lion litra began.[36] Nevertheless, in one respect, Thomsen was certainly correct: on the evidence of the overstrike, he showed that part of Breglia's chonology was ill-conceived, since the Minerva bronze must have been overstruck on a Syracusan coin in 289–8, or after, and according to Breglia's chronology, the quadrigatus which bears the inscription ROMA was in circulation by this date. However, this evidence does not prove that Rome began to strike silver coins only in 280. Elsewhere, I have maintained that the ROMANO coins

[33] Thomsen, III, pp. 24, 103–104.

[34] Max von Bahrfeldt, "Le monete romano–campane," *RIN* 1899, pp. 394ff.; Sydenham, *RRC*, pp. xvii, 1; Sambon, *Monnaies antiques*, pp. 438ff. have all noticed the great variation among the coins of this group. It is significant that the variation in legend, especially noticable in the different letter forms, is not characteristic of the first two ROMANO didrachms nor of the goddess head/lion litra; however, it is characteristic of the Hercules/She-wolf and, to a lesser degree, of the subsequent Romano-Campanian didrachms. All this would indicate that the Minerva/horse's head half-litra was issued with at least the last two ROMANO didrachms and because of the numerous specimens of the coin, likely issued with all of them.

[35] Thomsen, I, pp. 115ff., supplied a summary of the hoard evidence. The goddess head/lion litra is occasionally the only ROMANO bronze coin found in hoards. In the Vicarello deposit there are 1156 specimens. If anything, this proves the priority of the goddess head/lion coinage.

[36] Thomsen, III, p. 104.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

were issued until 269, at which time the mint was moved to Rome and the coins were thereafter struck with the ROMA legend.[37]

Another source of evidence used by scholars who follow a late chronology for the ROMANO coins is that of the bronze coins from the Roman colony of Cosa in Etruria, founded in 273. Cosa reproduced both the bearded Mars and Minerva obverse types with bridled horse's head reverse (PLATE VI, 6, ANS [Minerva]), and from this we might infer that the Roman prototypes for these coins might be placed before the foundation of the colony in 273.[38] A bronze coin modeled on the silver and bronze coins of her founder would be natural.

Thomsen, arguing from the date of 273 as a *terminus post quem* for the Cosa bronzes, dismisses Breglia's date of 320–315 for the didrachm, Mars/horses' head, ROMANO, as too early. Since it is the prototype for the Cosa coins, Thomsen concludes, the didrachm "must certainly have been struck much later, not too distant from 273."[39] Yet, as Thomsen himself has repeatedly demonstrated, coins, especially silver, had a long life and could be used as models for coins issued at a much later time. For example, he assumed that a Pyrrhic coin served as the prototype for the first ROMA-inscribed silver coin a full thirty years after the former coin made its appearance.[40]

The most important evidence in support of an early chronology for the Romano-Campanian coins is the small bronze coin with types, Apollo head, laureate, with archaic hair, r./forepart of bearded man-

[37] Richard E. Mitchell, "A New Chronology for the Romano-Campanian Coins," *NC* 1966, pp. 65–70.

[38] Thomsen, III, pp. 96–101, 97, figs. 12–13, has a thorough discussion of the location of the colony and the historical evidence which supports its existence. Cf. Livy, *Periocha* XIV; Pliny, *HN* III. 51; Velleius Paterculus, I. 14. 7. Although we are not well informed on the nature of this colony, it is a safe assumption that the colonists began minting coins immediately since few, if any, cities could maintain a normal existence at this time without some form of currency.

[39] Thomsen, III, p. 101.

[40] Thomsen, III, p. 137. One can also point to the Hercules/She-wolf didrachm, dated by Thomsen to 269, which was copied by Capua during the Second Punic War (cf. Thomsen, II, p. 108; III, pp. 117–118, fig. 27). Even by Thomsen's own dating, the bearded Mars head/horse's head coinage was discontinued before the Cosa coinage was struck. Why did Cosa not borrow the coin type currently being minted?

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

headed bull, with star of six or eight rays on shoulder r. (PLATE VI, 7, Vienna [Thomsen, I, p. 51, no. 1]). These coins which bear the unique inscription PΩMAIΩN are direct, almost exact, imitations of Neapolitan coins (PLATE VI, 8, ANS). Because of the Greek inscription and the fact that the Neapolitan prototype is generally assigned to the fourth century, Breglia argued, correctly, that the PΩMAIΩN coin must be dated before the introduction of the ROMANO coinages. She dated the coins immediately after the *foedus Neapolitanum* of 326. It was money of occupation coined for military needs and meant for local circulation.[41] Mattingly maintained that the PΩMAIΩN inscribed coins were the only exception to his argument that Roman coinage showed no Campanian (in particular, Neapolitan) influence as early as 325. He held that the coins were struck in the Roman name but in a Neapolitan mint, most likely just after the *foedus* with Neapolis.[42] No doubt Thomsen was correct to take the position that the *foedus* constituted only the *terminus post quem* for the coins and did not indicate how late the Roman didrachms were struck.[43] However, if the PΩMAIΩN coins were issued as a result of the *foedus* with Neapolis, and if Rome now for the first time had a coin, albeit with legend in Greek, would she not continue to issue coins or rather continue to have them struck for her in an experienced mint located in a region where many of her men were held in arms?

Another coin which attests to the Campanian influence on Roman coins is the unique bronze specimen, Minerva head, wearing helmet, r./bearded man-headed bull, r., inscribed ROMANO (PLATE VI, 9, Naples [Thomsen, I, p. 51, no. 2]).[44] Because the reverse of this coin has an exact parallel in the bronze coinage of Neapolis, Breglia concluded that it was struck in the latter city as the second and final step before the true Romano-Campanian coins were issued. She dated

[41] Breglia, pp. 25ff., 131ff. Breglia has an admirable discussion of the rôle Neapolis played in the beginnings of Roman coinage. She correctly insisted that since Rome issued a bronze coin with a Greek legend, all doubt that Roman silver coins could only be struck in the city of Rome ought to be removed.

[42] Mattingly, *NC* 1943, pp. 32–33.

[43] Thomsen, III, p. 81.

[44] Ettore Gabrici, "Monete inedite o rare del Museo Nazionale di Napoli," *Corolla Numismatica* (Oxford, 1906), p. 100, first published this coin and indicated its obvious connection with Neapolitan types.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the coin to ca. 324.[45] On the other hand, Mattingly thought the Neapolitan parallel was no earlier than 290–280, and since the obverse is found also on Thurian coins, he offered Thurii as a possible mint for this coin, suggesting that the coin was struck at the time Rome extended aid to that city in 282 or soon after.[46] Thomsen has correctly pointed out the futility of assigning any coin to a mint on the basis of one type alone, since the types are widely known throughout Campania and Southern Italy. He rightly disagreed with Breglia's placement of the coin before the Romano-Campanian coinage and preferred to associate the bronze coin with the other Romano-Campanian issues in light of their common inscription.[47] However, although the date of the coin is uncertain, the types do show Rome's familiarity with coins struck in cities to the south.

Some time ago, Kurt Regling demonstrated that the ROMANO didrachms were issued on a standard common in Campania and Northern Apulia in the fourth century.[48] The Neapolitan didrachms show an average weight of 7.24 grams for 363 specimens. It is only by chance that the bearded Mars/horse's head coinage shows exactly the same average for 53 recorded specimens, but the fact is not without significance. The coins of Nola, Cales, Nuceria, Teate Apulum, Suessa Aurunca, and Teanum Sidicinum show average weights of 7.17, 7.11, 7.09, 7.09, 7.03, and 6.94 grams respectively for their recorded specimens. Including the coins of Neapolis, the range of average weights covers exactly the same metrological distribution as the first three ROMANO-inscribed didrachms.[49] This evidence indicates that Rome issued her first silver coins for circulation in Campania and Apulia. The hoard evidence points to the same conclusion.[50] It is,

[45] Breglia, pp. 24–25, 127. [46] Mattingly, *NC* 1943, p. 33.

[47] Thomsen, III, pp. 82–83. Thomsen pointed out that Thurii was no more certain as the mint for this Roman bronze coin than was Neapolis, since a similar obverse also appears on Velian coins.

[48] Kurt Regling, "Zum älteren römischen und italischen Münzwesen," *Klio* 6 (1906), pp. 489–524, especially pp. 508–510. Regling obtained the average weights of the various issues from the comprehensive catalogue of Sambon, *Monnaies antiques*.

[49] Cf. Breglia, pp. 17, 36. The average weight of the bearded Mars coinage is taken from Breglia, who updated the list prepared by Bahrfeldt, *RIN* 1899, pp. 392–393.

[50] See below, pp. 54 ff.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of course, during the period of the Second and Third Samnite Wars (326–290) when Rome was most active in these areas.

Another, higher, standard was employed by Tarentum, Croton, Metapontum, Thurii, Locri, and Herakleia. They struck their didrachms on the average of about 7.80–7.50 grams.[51] It is generally agreed that the Tarentine didrachms were reduced to approximately 6.50 grams during the Pyrrhic occupation of the city, and that the other cities which issued silver coins on the higher standard must have soon followed suit, with the exception of Metapontum, which evidently did not issue reduced coinage.[52] Arthur J. Evans,[53] in his arrangement of Tarentine coins, uses the coinage of the Pyrrhic period as one fixed chronological point and the issues of Alexander of Epirus as the other, to build both a relative and an absolute chronology which are most useful for dating Italian coinages.

Even though the two standards mentioned above may reflect spheres of economic influence, they do not reflect closed economic systems; coins struck on both the higher and lower standards circulated together freely. Especially common are hoards with Neapolitan and Tarentine coins, and often with them are found coins of Metapontum, Thurii, Velia, and Herakleia. Not infrequently, Romano-Campanian coins are also found in such hoards.[54] The latter give evidence of dates for the Roman issues. As recorded by Evans,[55] the Beneventan Hoard contained a bearded Mars/horse's head as well as four specimens of the third silver coin issued by Rome, the Hercules/she-wolf suckling the twins, inscribed ROMANO. Because the Mars coin showed signs of wear while several of the Hercules didrachms were in *fleur de coin* condition, Evans concluded that the bearded Mars coins were issued earlier than the Hercules coinage. The Roman coins were hoarded with Tarentine and Metapontine coins struck on the heavy standard and coins of Nola, Velia, Hyria, and Neapolis on

[51] Regling, *Klio* 1906, pp. 508–510.
[52] Regling did not include Croton is his list of cities issuing reduced coins, but S. W. Grose, "Croton," *NC* 1915, pp. 179–191, showed that a reduced coinage was struck at Croton. He dated the lower weight didrachms to the period 280–277 when Croton revolted from Rome and was under the control of Pyrrhus.
[53] Arthur J. Evans, "The 'Horsemen' of Tarentum," *NC* 1889, pp. 1–228.
[54] Thomsen, I, pp. 100–101.
[55] Evans, *NC* 1889, pp. 93, 215.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the lighter standard. The Tarentine pieces belong to periods IV and V of Evans' chronology, or between 334 and 302. Following Theodor Mommsen's traditional chronology for the Roman coins, Evans dated the hoard to ca. 310, clearly about twenty years too early.[56] Thomsen agreed with the sequence of Roman coins but, of course, disagreed with the date proposed by Evans.[57] He showed that certain full weight Tarentine coins may be associated with reduced coins of Pyrrhus and may have been issued after his arrival.[58] However, the coins belong to period VI of Evans' sequence, and none of the coins which, by either moneyer's signature or symbol can be associated with Pyrrhus, were found in the Beneventan hoard. Thus, the Tarentine and Roman coins in the Beneventan hoard were in circulation before the Pyrrhic period. Basing her position on a similar argument, Breglia cited the Beneventan hoard as evidence for her early dating of the ROMANO didrachms,[59] but Mattingly doubted that the hoard's contents were entirely known, claiming it may well have originally included later specimens.[60] However, the contents of the Beneventan hoard receive confirmation from the Valesio hoard.[61] In this hoard, Tarentine full weight coins of Evans' period V are included with two bearded Mars/horse's head specimens and other full weight coins of Herakleia, Metapontum, Thurii, and Terina. This

[56] Evans, *NC* 1899, pp. 93–94.

[57] Thomsen, III, p. 69. Thomsen did not use the Torchiarolo hoard as evidence (cf. I, p. 100) for the priority of the bearded Mars didrachm because it contained only one specimen of this coin. Judging from the diverse contents of the hoard, his decision appears well founded. However, Thomsen did cite the Capua hoard as evidence (cf. I, pp. 100–101) but admitted the hoard's continuity was broken by a late Capuan bronze. While working at the American Numismatic Society, I learned from Michael H. Crawford of Christ's College, Cambridge, that the Capua hoard is in fact a collection of unrelated coins and not a hoard at all. If this is true, the evidence from the Capua hoard should be dismissed.

[58] Thomsen, III, pp. 139–142.

[59] Breglia, pp. 29–30, 55.

[60] H. Mattingly, Review of Breglia, *NC* 1953, p. 176. E. S. G. Robinson, "A South Italian Hoard," *NC* 1945, p. 97, also expressed doubt. However, Evans did not hesitate to use the evidence and gave more details concerning the hoard's contents than is assumed. The Tarentine specimens were all full weight and there were no Campano-Tarentine coins in the hoard; see Evans, *NC* 1889, pp. 92–94.

[61] For details see Mitchell, *NC* 1966, p. 68, n. 5.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

evidence not only confirms the fact that the Mars didrachms were the first to be struck, but also, when viewed with the evidence from the Beneventan hoard, confirms our conclusion that both the first and third ROMANO didrachms were issued before the Pyrrhic War and the reduction at Tarentum. There is further evidence in support of this in the hoards which do contain reduced coins of Tarentum. The Roman coins which are found in such hoards always include ROMA-inscribed coins, and the latter usually include the quadrigatus.[62]

I have argued elsewhere that the ROMANO coins continued until 269 when the ROMA coinage began, that the Hercules didrachm, the third silver coin issued by Rome, is historically better dated to ca. 296, and that the numismatic evidence for a later *terminus post quem* is untenable.[63] Briefly, my argument is as follows. The coin commonly mentioned as the prototype for the Hercules type is definitely Agathoclean (317–289), and since the Roman coin is found hoarded with pre-Pyrrhic coins of Tarentum, it is earlier than 280. A coin of Velia found in the Beneventan hoard is described as *fleur de coin* or in the same state or preservation as some of the Hercules didrachms found in the same hoard. Moreover, the Velian coin has a triskeles symbol on the reverse, and, as stated by Seltman and accepted by Küthmann and Thomsen, this coin ought to reflect Agathoclean control or influence in Velia ca. 300. Therefore, because of the superb condition of a coin dated to about 300, the hoard and the Roman coins with the Hercules type, which are likewise in superb condition, are best dated to the same time. The she-wolf with the suckling twins, the reverse type of the Hercules didrachm, commemorates a statue group erected by the Ogulnii in 296 which featured the same subjects, and the Ogulnii were clients of the Fabii, who, in turn, considered Hercules as their patron. Furthermore, a statue of Hercules was put up at Rome in 306 (Livy, IX. 44.16), and there was considerable controversy involving the cult of Hercules a few years before. In sum, the Hercules/she-wolf, twins types fit nicely into the picture we have

[62] Cf. Thomsen, I, pp. 100ff. One might also add that Campano-Tarentine coins are usually found in such hoards. For some finds the exact contents of the hoards are unknown.
[63] *NC* 1966, pp. 65–70.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of Roman history ca. 295. The fourth and last ROMANO-inscribed didrachm is the Roma head in Phrygian helmet, r./victory fastening taenia to palm-branch. This coin was struck on the six-scruple standard and has Greek control letters which link it to Egyptian coins from the time of Ptolemy II and Arsinoe II. The Romano-Egyptian legations of 273 are reflected in this issue in some way, but the standard is the reduced one employed by Tarentum after the arrival of Pyrrhus. Rome adopted this standard, which was now used by many cities in South Italy, when she took Tarentum in 272, and the Roma and victory types reflect her recent success against the Epirote king. Thus, the last ROMANO coin is dated to ca. 272. This means that when Rome began to issue coins directly from the city in 269, the coins bore the inscription ROMA. The change in the legend reflects the change in mint.

To return to the argument: if the Hercules didrachm is dated to the period immediately after 296, then the bearded Mars coinage and the second silver coin issued (head of Apollo/prancing horse with star symbol) must be earlier. Therefore, since the bronze coin inscribed ΡΩΜΑΙΩΝ suggests that Rome's first coins were struck after her *foedus* with Neapolis, it is reasonable to place the *terminus post quem* for Roman silver coinage at ca. 326. The weight of the first three Roman didrachms shows that they were meant to circulate in Campania and Apulia, where Roman troops were extremely active in the period 326–290. During this time, Rome was too militarily active, too diplomatically involved, and generally too greatly interested in extending her influence into the South and East to neglect so vital an agent in expansion as coinage. While it is possible that Rome came into contact with merchants (and coins) from many of the cities of Italy through her Campanian allies, especially Neapolis, the choice of coin types might also suggest that Rome had direct contact with such cities as Metapontum and Thurii in the late fourth century.

The Historical Evidence

The narrative of various ancient historians gives evidence to support the above chronology, and isolated and frequently brief and unexplained statements indicate Rome's ever increasing interest in

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the South and the direction her expansion was taking. Often such evidence is disregarded or de-emphasized, but the references to fourth century Roman contacts in Campania, Apulia, Lucania, and even Calabria are too numerous and logical in the light of subsequent events to be totally ignored. Rome's struggle with the Samnites dominates the tradition, and the ancients were already anticipating Rome's approaching conflict with Tarentum and Pyrrhus. However, from the tradition, it is clear that when Tarentum called in Pyrrhus to fight her battle with Rome, it was not the first time she saw the danger in Roman expansion but was instead her last attempt to stave off the inevitable. The study of Roman coin types helps to explain the reason for Tarentine hostility toward Rome. Like the metrological evidence, the types reaffirm Roman connections with Campania, Lucania and Apulia generally and with Neapolis, Metapontum, and Luceria specifically. Whatever the nature of Roman contacts in these areas, they made Tarentum uneasy.

After Rome defeated the Latins in 338, she was allowed to work her will in Campania without interference from the Samnites until 326. Tarentum unintentionally aided the Roman cause by calling in mercenaries to help in her struggle against the Lucanians and their sometime allies, the Samnites. One mercenary leader was Alexander, King of Epirus, who was so successful that he must have caused more alarm to the Samnites than did the Romans.[64] Since Rome was concentrating on affairs in central Italy, she willingly made concessions in the South. Justin reported that Alexander made a treaty (*foedus amicitiamque*) with the Romans, Metapontines, and Poediculi.[65] Doubtless this is the treaty between Rome and Tarentum referred to by Appian, our only source for the one known clause:

[64] The date for Alexander's Italian adventures is variously given. Livy, VIII. 3. 6–7, gives 340 as the beginning of his campaign and 326 as the date of his death (VIII. 24. 1). That both dates are incorrect is not disputed. Pierre Wuilleumier, "Tarente des origines à la conquête romaine," *Bibliothèque des Écoles Françaises d'Athènes et de Rome* 148 (1939), pp. 82f., and K. J. Beloch, *Römische Geschichte bis zum Beginn der punischen Kriege* (Berlin, 1926), p. 372, have admirable discussions of the evidence and have proved conclusively that Alexander's adventures in Italy were in the period from 335 to 331/0.

[65] Justin, XII. 2. 12; Livy, VIII. 17. 10: under the year 332 Livy says that Alexander *pacem cum Romanis fecit.*

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

no Roman [war] ship was to sail beyond the Lacinian Promontory.[66] The treaty indicates that Tarentum feared that Rome might engage in naval operations in the South. We can not exclude the possibility that beneath this treaty lies a hint of a Roman contact with the extreme South and possibly with Metapontum. It is significant that Metapontum lies within the restricted waters. However, land contacts were not limited, nor would a commercially oriented state like Tarentum want to restrict merchantmen from sailing south to trade.[67] Certainly this was the ideal time to exact from Rome the promise not to sail beyond the Lacinian Promontory, since she probably had limited contacts with the region. But the situation soon changed, and Rome might well have felt her interests were best served by establishing permanent relations with the area.

It was Tarentum's policy to withdraw support from her mercenary leaders when they became too ambitious and struck out on their own; Alexander suffered this fate. He waged war victoriously against the Apulians, Bruttians, Lucanians, and Samnites,[68] and having con-

[66] Appian, *Samn* VII. 1, says that the treaty was old (παλαιῶν) when a Roman squadron sailed beyond the promontory in 282 and broke the agreement. T. Mommsen, *The History of Rome*, II, trans. W. P. Dickson (New York, 1898), pp. 41–42, thought the year 348 was the most likely time for the treaty's origin. The treaty with Tarentum was associated with the Romano-Carthaginian treaty of that year. Mommsen's position is well defended, but we know of no Roman contact with Tarentum so early. Many scholars dated the treaty to ca. 303 when Rome and Tarentum, under Cleonymus, were at war (Diodorus, XX. 104. 1; Livy, X. 2. 1–3). G. DeSanctis, *Storia dei Romani*, II (Torino, 1907), p. 347, n. 2; Beloch, *Römische Geschichte*, p. 435; Wuilleumier, p. 95; J. H. Thiel, *A History of Roman Sea Power before the Second Punic War* (Amsterdam, 1954), pp. 20–23; and Cassola, *I gruppi politici romani*, p. 38, supported the later date. Nevertheless, Appian did call the treaty παλαιά in 282, and the arguments against a later date are very convincing. M. Cary, "The Early Roman Treaties with Tarentum and Rhodes," *JP* 35 (1920), pp. 166–170, argued conclusively that "no other political situation fits the conditions of our treaty so well as that of 332–0 B.C." (p. 170). The crux of his position was that Rome was not likely to allow Tarentum to restrict her naval activity after she gained a firm position in Apulia and Lucania. Also, T. Frank, *CAH* VII, p. 640, believed that it was not plausible that Rome would agree to such a treaty after the colonization of Luceria in 314.

[67] For the position that the treaty applied only to war ships, see DeSanctis, *Storia dei Romani*, II, p. 347; Beloch, *Römische Geschichte*, p. 435; Thiel, *Roman Sea Power*, pp. 21–22; and Cassola, *I gruppi politici romani*, p. 38.

[68] Livy, VIII. 17.9, VIII. 24. 1; Justin, XII. 2. 1, XVII. 3. 15; Strabo, VI. 3. 4 (280).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

quered the Lucanians and Samnites at Paestum,[69] he envisioned himself capable of realizing in the West what his nephew was achieving in the East. Alexander incurred the hostility of the Tarentines when he took control of Herakleia, a Tarentine colony, and transferred the assembly of the Greek cities of Italy, which met there, to Thurii,[70] out of Tarentum's reach. As Arthur Evans suggested, it may be that he then established himself at Metapontum, using that city as a sentinel against Tarentum.[71] That Metapontum was his base of operations is indicated by numismatic evidence as well as by Livy's statement that upon his death his bones were returned to Metapontum and thence to Macedonia.[72]

The situation in South Italy was in a state of confusion after the death of Alexander because certain cities, such as Thurii and Metapontum, which supported Alexander's plans, feared Tarentine reprisal. Nothing would have been more natural than for such cities to look to Rome for protection,[73] especially since there was bad blood between Tarentum and both Thurii and Metapontum even before this time.[74] Then Tarentum became even more suspicious of the extension of Roman influence, when in 326 it reached to Neapolis, the chief commercial city of Campania. Since Roman influence in Neapolis could make itself felt throughout Southern Italy, Tarentum had cause to fear Rome's growth as a possible danger to her own position, and she would support Rome's enemies and oppose her whenever and wherever the need arose.

An interesting feature of the tradition concerning Rome's war against Neapolis was the appearance in the city of Tarentine envoys promising to send ships to aid the beleaguered residents and appealing to their Greek bretheren to withstand the Roman assault.[75] Some modern historians have considered the account apocryphal, an an-

[69] Livy, VIII. 17. 9–10.
[70] Strabo, VI. 3. 4 (280); cf. Livy, VIII. 24. 4. Tarentum and Thurii seem to have been opponents over a long period of time; see Strabo, VI. 1. 13–14 (263–264).
[71] Evans, *NC* 1889, p. 81. Evans' position was accepted by Wuilleumier, p. 85.
[72] Livy, VIII. 24. 16–17; cf. Justin, XII. 2. 15, who said Thurii ransomed his body and buried it.
[73] For a similar position see Wuilleumier, p. 89.
[74] Strabo, VI. 1. 14–15 (264–265).
[75] Livy, VIII. 25. 7–8, VIII. 27. 1–5; Dionysius, XV. 5. 2.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

nalistic lie designed to justify the later Roman war against Tarentum, or meaningless, since the Tarentines were too distant to help and too remiss in their duties to be trusted.[76] However, there is good cause to think that Tarentum would have sought to support Neapolis.

Tarentum's presence in Neapolis implies that for the moment she was backing the Samnites, who had garrisoned the city. If, as previously stated, Rome had reached an understanding with certain cities in the extreme south and was in the process of winning Neapolis, she would throw her rivals, the Samnites and the Tarentines, into one another's arms. Now the logical approach for Rome was to drive a wedge between the two, and she did just that by means of the alliance with the Lucanians and Apulians.[77] If Tarentum was blinded by rage and hatred for the Romans when they won Neapolis, these feelings were intensified by the knowledge that Lucania and Apulia had joined Rome. According to the Tarentine complaint, Rome was at the very gates of the city and all depended upon the success of the Samnites, now weakened by the loss of their Lucanian allies.[78] By deceit Tarentum tricked the Lucanians into war with their new allies, the Romans, and in that same year the Second Samnite war began.[79]

The Lucanian alliance with Rome, made in 326, was of brief duration. Nevertheless, any Lucanian union with Tarentum must have been equally brief, since the Lucanians were well known to be the habitual enemies of that city, and they would have little respect for a Samnite alliance if such an agreement meant extended peace with Tarentum. Furthermore, we cannot believe, as Livy did, that the Lucanians were capable of uniform action. In Lucania there was room for pro-Roman as well as pro-Tarentine (and Samnite) factions.

When considering Apulia, historians have customarily used Livy against himself. They point to contradictions in his narrative. For example, for the year 323 Livy referred to a dual tradition, one which

[76] Mommsen, *History of Rome*, I, p. 469; T. Frank, *Roman Imperialism* (New York, 1929), p. 45, n. 29; DeSanctis, *Storia dei Romani*, II, pp. 298–299; and J. W. Spaeth, *A Study of the Causes of Rome's Wars from 343 to 265 B.C.* (Princeton, 1926), p. 55.
[77] Livy, VIII. 27. 1–2.
[78] Livy, VIII. 27. 3–4.
[79] Livy, VIII. 27. 5–11.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

said that Rome waged a new war against the Apulians in that year and another which said that the war was waged in defense of the same people. Livy preferred the former, because in his mind the Samnites were incapable of protecting themselves against the Romans and thus unlikely to open a front against the Apulians.[80] Later Livy referred to an expedition by Fabius into Apulia,[81] but he forgot, as do modern historians, his own statement that the rumor which the Samnites spread in order to draw the Romans into the Caudine Pass was that the Samnites were in Apulia and about to take Luceria, a good and faithful ally of Rome. The key to the problem is supplied by Livy himself, who gave the reason for Rome's hasty march to Luceria's aid. It was done to forestall the defection of all of Apulia: *Haud erat dubium quin Lucerinis opem Romanus ferret, bonis ac fidelibus sociis, simul ne Apulia omnis ad praesentem terrorem deficeret.*[82] In other words, Rome was not allied with all Apulia but only with Luceria and perhaps a few other cities.

Some historians doubt the existence of a Roman alliance with any or all of Apulia or Lucania at such an early date as 326, but even if these reservations are accepted, there is no reason to extend that doubt to the events which tell of Roman involvement in these same areas following the Caudine disaster in 321.[83] The defeat at the Caudine Pass weakened Rome's federation, but during the brief period of peace which followed, she immediately set about to compensate for her losses and to compromise the Samnite gains by surrounding the latter with a chain of allies. In 318, Canusium and Teanum submitted to Rome.[84] Since they now gave hostages to

[80] Livy, VIII. 37. 3–6.
[81] Livy, VIII. 40. 1.
[82] Livy, IX. 2. 1–5; cf. Beloch, *Römische Geschichte*, p. 404, who claims the tradition was fabricated.
[83] In spite of what he considered many irregularities in the tradition, E. T. Salmon, *Samnium and the Samnites* (Cambridge, 1967), pp. 230–231, supported Roman diplomatic activity in Apulia in 318–317. Beloch, *Römische Geschichte*, pp. 400ff., also dated Rome's first contacts with Apulia to the period after 321.
[84] Livy, IX. 20. 4; Diodorus, XIX. 10. 2. Arpi also seems to have been friendly toward Rome, since Livy reported, IX. 13. 9–10, that Roman troops were provisioned from this city in 320. Beloch, *Römische Geschichte*, p. 368, cited Livy, IX. 44. 16, and Diodorus, XX. 90. 4, as evidence that Arpi was taken

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rome, they may have been partners in the Romano-Apulian alliance of 326 and then defected after the Caudine disaster. Soon after, Roman forces took Forentum, an Apulian city on the border near Lucania.[85] Then the campaign was extended into Lucania, and in 317, the city of Nerulum, a short distance from Thurii, was taken.[86]

If earlier Roman contacts with Apulia were viewed with suspicion by Tarentum, the fall of the above mentioned cities must have been alarming. Apulia and Lucania were part of her vast commercial empire, and Roman intrusion was not welcome. Roman forces had no better reason for advancing as far south as Nerulum than to establish contacts with one of Tarentum's arch rivals, Thurii, and perhaps also with Metapontum. That Tarentum was immediately concerned with Roman encroachment is evident from Tarentine intervention at Luceria. As told by Livy, the tale may be partially fictitious,[87] but no one can doubt the real possibility that a complaint of some sort was lodged or that Tarentum worked behind the scenes against Roman interests in the area.[88] Rome established a large colony at Luceria in 314, and this city remained a bulwark for protecting Roman interest in the area for decades. Rome did not cease making further inroads southward, and her movements in the

at the end of the war, but both historians claimed that the city was recaptured at the later date.

[85] Livy, IX. 20. 9. Beloch, *Römische Geschichte*, pp. 402f., suggested that this was the same city which Diodorus, XIX. 65. 7, called φερέντη. Furthermore, Beloch maintained that the activity around Forentum and Nerulum was an anticipation of later events. Salmon, *Samnium*, p. 231, has taken the same position. Their arguments do not seem cogent in light of Roman movements in the next few years.

[86] Livy, IX. 20. 10.

[87] Livy, IX. 11–16. See Livy, IX. 26. 1–5, for the colonization of Luceria; cf. Velleius Paterculus, I. 14. 4, Diodorus, XIX. 72. 8–9. The traditional accounts of 321–315 are a maze of contradictions prompted by the desire of some proud Roman annalists to erase the memory of a humiliating defeat and an equally humiliating peace. It has been conclusively shown that many of the accounts of the events ca. 320 are duplications of events which occurred later. Authors may differ on minor points, but there is widespread agreement on the nature of events from 321–315. A few of the more important discussions are H. Nissen, "Der Caudinische Friede," *Rheinischen Museum für Philologie* XXV (1870), pp. 1–65, Beloch, *Römische Geschichte*, pp. 397ff., and E. T. Salmon, "The Pax Caudina," *JRS* 19 (1929), pp. 12–18.

[88] Spaeth, *Rome's Wars*, p. 55. Wuilleumier, pp. 90–91, pointed out that Tarentine opposition to Roman advancement was quite natural and that all such features which occur in the tradition cannot be false.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

next decade in the near regions of Tarentum were an additional source of anxiety to the latter city; in fact, Rome seems to have endangered Tarentum herself.

Diodorus reported that in 310, when the Roman army was a great distance away, the Iapyges, who supported the Romans, were attacked by the Samnites.[89] Then, in 307, a Roman campaign was directed at the Sallentini,[90] who, like the Iapyges, were near neighbors of the Tarentines. The Iapyges inhabited parts of Southern Apulia and Calabria, that is, part of the same general area as the Sallentini.[91] The Romans invaded Iapygia in 306 and took Silvium,[92] a city held by the Samnites and just over a day's march from Tarentum. Thus we have three references to Roman involvement in the territory around Tarentum. We hear no more of Roman activity in this area for a few years; she was busy finishing the war against the Samnites, with whom peace was made in 304.[93] But Roman interest in the extreme Southeast must have remained alive, because Diodorus said that Tarentum was at war with the Romans and Lucanians when she sought mercenary assistance from Cleonymus to meet the danger.[94] Although Livy's account of this war is confused, nevertheless it is clear that the Romans were active in the Sallentine peninsula and that they restored Thuriae, a city in that region taken by Cleonymus, to its original inhabitants.[95] The site of this city is unknown, and it has been suggested that Livy actually meant Thurii.[96] While

[89] Diodorus, XX. 35. 1–2.

[90] Livy, IX. 42. 4–5. Wuilleumier, pp. 94, 668–669, believed that Tarentum supported the Samnites with arms and money and was the source of the gold and silver armor worn by the Samnites in a battle against the Romans in 308; cf. Livy, IX. 40. 1–17. Beloch, *Römische Geschichte*, p. 417, believed the events false because no detailed account was given.

[91] Strabo, VI. 3. 6 (282), said that from Brundisium to Tarentum one travels through the area variously known as the Messapian, Iapygian, Calabrian, or the Sallentine Peninsula. The same author, VI. 3. 8 (283), located Silvium approximately 300–350 stades from Tarentum. Spaeth, *Rome's Wars*, p. 56, asked, "Was Rome employing once more one of her favorite strokes of policy—attempting to secure a position in the rear of an actual or potential rival?"

[92] Diodorus, XX. 80. 1.

[93] Livy, IX. 45. 1–4; Diodorus, XX. 101. 5.

[94] Diodorus, XX. 104. 1–4. Perhaps Tarentum called in Cleonymus because Rome had just made peace with the Samnites, whom Tarentum had hoped would stop the Romans.

[95] Livy, X. 2. 1–3.

[96] Beloch, *Römische Geschichte*, pp. 435–436.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

this is possible, since the latter was a foe of Tarentum and no doubt would have sided with Rome, in some manuscripts of Strabo we find that there was a Θυραῖαι, Θυρέαι or Οὐρία in Iapygia.[97] Thus it seems certain that Rome made friends in the territory about Tarentum and that Cleonymus was called in to punish the pro-Roman cities and drive off the intruder. Roman activity in the war against Cleonymus fits well with the picture we have of earlier Roman campaigns in the same area.

Metapontum was another city which probably had friendly dealings with Rome and, as a consequence, suffered at the hands of the Tarentine mercenary. Cleonymus supposedly used Lucanians in a treacherous assault on Metapontum which resulted in his carrying off numerous hostages and a great quantity of silver.[98] It should not puzzle us that Lucanians also fought alongside Romans in the war.[99] Roman friendship with Metapontum, a Greek city in Lucania, may be the source for her Lucanian allies and at the same time the reason for Lucanian hostility. The Lucanians were no more united in purpose than were the Apulians or the Samnites. The ancient historians frequently view them as a people with a common policy, but since they lacked organization, combined action was impossible. As stated earlier, Seltman put forth the thesis that the triskeles symbol on Metapontine coins indiated that the city was allied with Agathocles;[100] however, Agathocles was active in the region of South Italy after 300.[101] Why then was Metapontum so roughly handled? In view of the testimony that Cleonymus and Tarentum were at war with Rome,

[97] VI.3. 6. (282) Οὐρία (Uria) is an emendation and accepted by Mommsen, *History of Rome*, I, p. 483. However, Wuilleumier, p. 96, reported the existence of a bronze caduceus with the inscription ΔΑΜΟΣΙΟΝ ΘΟΥΡΙΩΝ/ ΔΑΜΟΣΙΟΝ ΒΡΕΝΔΕΣΙΝΩΝ. [98] Diodorus, XX. 104. 3.

[99] Diodorus, XX. 104. 1.

[100] See above, pp. 43 f.

[101] Agathocles' attacks on Corcyra and Croton were after 300 (see Diodorus, XXI. 2–3; XXI. 4). Strabo, VI. 3. 4 (282), placed his aid to Tarentum after Cleonymus' adventure. Moreover, Diodorus, XXI. 4. 4, mentioned a treaty which Agathocles made with certain Italian peoples and placed the reference between events dated to 298 and 295. H. J. W. Tillyard, *Agathocles* (Cambridge, 1908), pp. 210–218, suggested that Agathocles answered requests of certain Italian peoples for assistance against Rome. Tillyard dated Agathocles' Italian adventures after 300. Beloch, *Römische Geschichte*, p. 436, suggested that the Roman colony at Venusia (291) was established to protect Roman

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

it is reasonable to assume that Metapontum and Rome were allied in some way. Rome was active in the Southeast for years before Cleonymus' arrival, and her friendship with Metapontum, Thurii, and other cities in Lucania, Apulia, and Calabria may have been of long standing. Such a friendship would benefit all concerned, and if Rome had not come into contact with the above territories at the time of Alexander's Italian adventures, then after his death Metapontum and Thurii would seek to establish ties with Rome as a potential guardian against Tarentine intrusion into their affairs. If such were the case, Rome would have gained strong economic and political allies from whom she could learn much and would have incurred Tarentum's lasting hatred in the process.

Although nothing is heard of Metapontum after peace was made, the tradition suggests that Roman interest in south Italy was firmly established. For example, a *foedus* granted to certain Lucanians who were being harassed by Samnites gave Rome the pretext for the Third Samnite War (298–290).[102] Then, in the next decade, Rome protected Thurii against Lucanian aggressors: when she sent a fleet around the Lacinian promontory in support of the Roman garrison stationed at Thurii, she broke the "old" treaty between Rome and Tarentum and precipitated the Pyrrhic War.[103] This was merely the beginning of the final stage of Roman military expansion in south Italy. The process had begun almost fifty years earlier in Campania, and, as if Tarentum had known the ultimate goal, she had opposed Roman southern expansion from the outset.

In the fourth century, Roman interests were not restricted to her own limited territory. Her horizon had significantly widened to take

---

interests in the South against Agathocles. It is possible that when Cleonymus failed to achieve the desired result, Agathocles was called in by Tarentum to oppose the Roman menace.

[102] Livy, X. 11. 10–13, X. 12. 1–4; Dionysius, XVII–XVIII. The latter said that assistance for the Lucanians was the πρόφασις for the war; the reason was Samnite power. The sources for the war (Livy; Frontinus, *Stratagems* I. 6. 2) conflict. One or both consuls for 298 were active in Lucania and perhaps against some of the Lucanians. The elogium of L. Cornelius Scipio Barbatus, Cos. 298 (*CIL*, I², p. 377, no. 7), is the best source and claimed that Scipio *subigit omnen Loucanam*. If this was the case, then Metapontum found security under Roman protection.

[103] Livy, *Periocha* XII; Appian, *Samn.* VII. 1, cf. VII. 2; see above pp. 58f.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

in areas which previously were outside her field of vision. In 313 Rome sent a colony to the island of Pontia.[104] The purpose of the colony is unknown, but possibly it was founded to control piracy in the Tyrrhenian Sea and to secure the Roman lines of communication with Campania.[105] The construction of the *Via Appia* (begun in 312) lends support to this argument in so far as the road would lead to greater control of and increased contact with Campania.[106] Also, the creation of the *duumviri navales* in 311 would facilitate the policing of the Tyrrhenian Sea.[107] However, it is not difficult to see the foundation of the colony at Pontia, the *Via Appia*, and the creation of the duumviral squadrons as part of a policy which looked beyond the immediate concern for security in Campania. Indeed, Mommsen interpreted the policy as part of the Roman design to subjugate Italy,[108] while others maintained that it was a policy of expansion based upon the desire for increased trade.[109]

Regardless of the interpretation, from either a political or an economic point of view, Carthage, like Tarentum, had cause to fear such a policy. A Roman colony on Pontia plus an enlarged, improved Roman fleet would arouse Carthaginian suspicion and might well cause her to demand some assurance from Rome that her own Mediterranean position was not in jeopardy, especially since this may not have been the first time Carthage had reason to suspect Roman activity in Tyrrhenian waters. Diodorus reported that in 387 Rome sent colonists

[104] Livy, IX. 28. 7; Diodorus, XIX. 101. 3.
[105] Thiel, *Roman Sea Power*, pp. 10–11; cf. Frank, *Roman Imperialism*, p. 58, n. 17.
[106] Livy, IX. 29. 5–6; Diodorus, XX. 36. 2; *CIL*, I², p. 192 (elogium 10).
[107] Livy, IX. 30. 4.
[108] Mommsen, *History of Rome*, I, p. 476.
[109] Beloch, *Römische Geschichte*, p. 409; H. H. Scullard, *A History of the Roman World from 753 to 146 B.C.* (London, 1961), p. 112; Thiel, *Roman Sea Power*, pp. 10–11; and Cassola, *I gruppi politici romani*, pp. 128–9, are among those who viewed the colonization and road building as part of a uniform program. However, some stressed expansion as the major factor in such a program while others claimed that protection was the motivation. E. S. Staveley, "The Political Aims of Appius Claudius Caecus," *Historia* 8 (1959), pp. 429–430, and Cassola, *I gruppi politici romani*, pp. 128–145, both made strong cases for an economic interpretaion of such expansion and both maintained that Appius Claudius Caecus and his circle of friends were instrumental agents in the formulation of such a policy and present a picture of rival *factiones* within Rome.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

to Sardinia, which had revolted from Carthage the previous year.[110] If we can trust Diodorus, the two references do much to explain why, in the second treaty with Carthage (348), Sardinia was declared completely off limits to Romans.[111] Moreover, Theophrastus said that Rome once (ποτε) tried to colonize Corsica with twenty-five ships.[112] The attempted colonization best fits the period immediately after the creation of the duumviral squadrons when Rome certainly had twenty-five ships at her disposal.[113] We can assume that Carthage was unhappy with the attempt, because we know that one of the provisions of the Romano-Carthaginian treaty of 306 was *ut Corsica esset media iter Romanos et Carthaginienses*.[114] Evidently Carthage

[110] Diodorus, XV. 27. 4. Thiel, *Roman Sea Power*, p. 55, questioned this reference at the risk of being found "guilty of the sin of trying to prove my point by eliminating items that tell against it." He claimed first that Rome was too weak and too badly in need of men to send 500 colonists to Sardinia so soon after the Gallic sack. He admitted that her conquests prior to the sack may have supplied Rome with sufficient manpower and ships but says that the catastrophe destroyed her accomplishments. Second, by the terms of the first treaty with Carthage, Rome was only allowed to trade in Sardinia (Polybius, III. 22), and since Rome's colonies were always military and not commercial, she would not risk a break with Carthage, who undoubtedly sent a force to Sardinia to quell the revolt. However, we do not know that all Roman colonies were military, and certainly Ostia and Antium, just to name two, were more than likely partially oriented toward commerce. Furthermore, the colony sent to Sardinia may well have been designed to offset the Gallic disaster. In other words, it was Rome's first attempt to win back a position of supremacy and to make amends for her losses. It may be that the colonists were refugees.

[111] Polybius, III. 24. 11–14.

[112] Theophrastus, *Historia Plantarum* V. 8. 2.

[113] The ships could not have sailed after 287, the year of Theophrastus' death. See *RE Suppl.* VII, s.v. "Theophrastos" (O. Regenbogen), esp. col. 1357. Thiel, *Roman Sea Power*, pp. 18–19, agreed that this was the best date if the Theophrastus reference is authentic. But Thiel said that the use of ποτε places the event in the remote past and claimed that Theophrastus was guilty of confusing Romans with Etruscans. Furthermore, Rome had her hands full in 311 and would not have tried to colonize overseas. The fact that Pontia was colonized in 313 does not matter because it "simply belonged to Italy." In answer to Thiel's arguments, it ought to be pointed out that ποτε is perhaps more often used as just a temporal infinite, with no sense of "remote past." The confusion between Etruscans and Romans is conjecture, and it is simply not true that the colonization of Pontia should not be considered as evidence, since men and ships were still needed—the very ingredients of the colony sent to Corsica. There is one possibility that has not been mentioned, namely, that the attempted colonization of Corsica actually resulted in the colonization of Pontia.

[114] Servius, *Ad Aen* IV. 628; cf. Livy, IX. 43. 26.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

could not exclude Rome entirely from the island, as she had done earlier in the case of Sardinia, and this may reflect the increase in Roman power on the seas between the years 348 and 306. A further indication of the mounting Carthaginian suspicion of Rome's rising power is the clause in the Philinus treaty, as the treaty of 306 is called, which said that neither the Romans nor the Carthaginians were to approach the shores of the other's territory.[115] Presumably this meant the recognition of Italy as the Roman sphere of influence and Sicily, Africa, and other areas specified in earlier treaties as the Carthaginian.

However, Carthaginian respect for Rome was only partly the reason for the Philinus treaty. The activity of Agathocles, ruler of Syracuse, makes the picture complete.[116] Agathocles was engaged in a campaign to win control of Sicily and, in the process, came to blows with Carthage. The latter had greatly increased her military strength in Sicily during Agathocles' reign and by 311 had attacked Syracuse.[117] Agathocles carried the war to Africa and, after limited success, returned to Sicily where his position was threatened.[118] The details of the military activity do not concern us here, but of significance is the mercenary support which Agathocles enlisted from Italy. Eighteen Etruscan ships helped to break the Carthaginian blockade of Syracuse in 307 and enabled Agathocles to return to Africa.[119] We do not know where the Etruscans came from or, for that matter, where Agathocles recruited the Campanian and other mercenaries he used in his adventures.[120] On the one hand, the Etruscans and other

[115] M. Cary, "A Forgotten Treaty between Roma and Carthage," *JRS* 9 (1919), pp. 67–77, has convincingly argued for the authenticity of this treaty and all attempts to refute it have, in my estimation, failed.

[116] Diodorus, XIX. 65. 1–6; XIX. 102–4. Cary, *CAH* VII, pp. 622ff. Only a general outline can be given here. There will be no attempt to argue the many points which are disputed, since they have no bearing on the subject. For the most part, the dates are those given by Cary.

[117] Diodorus, XIX. 106–110, XX. 13–18; Justin, XXII. 3. 8–10; Cary, *CAH* VII, pp. 623f.

[118] Diodorus, XIX. 110. 5, XX. 3, XX. 55. 5; Justin, XXII. 4–5, XXII. 8. 1–3.

[119] Diodorus, XX. 61. 6; Justin, XXII. 8. 4–5.

[120] For Samnite, Etruscan and Celtic mercenaries, see Diodorus, XIX. 106, XX. 11. 1, XX. 64. 2. Margit Särström, *A Study of the Coinage of the Mamertines* (Lund, 1940), pp. 2–5, argued that since Diodorus never mentioned Campanians, the many references to Campanians (Polybius, I. 7. 2, I. 8. 1;

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

mercenaries from Italy may have been adventurers without much political significance except that they came from Italy, and Carthage, while she wanted to set very definite limits to Rome's own activities, also wanted to inform the latter, now the recognized mistress of Italy, that hereafter she ought to check the flow of mercenaries southward.[121] On the other hand, there is some evidence that Rome may have given encouragement to such adventurers and may even have practiced piracy. Strabo informs us that Demetrius Poliorcetes sent back to Rome Italian pirates whom he had captured with the complaint that the masters of Italy ought not to send out pirates.[122] Later, proud Roman historians would have omitted any record of pirate activity, but we ought not to assume the tradition to be false. Polybius says that in 168 Rome and Rhodes had been in contact for about 140 years.[123] Demetrius had undertaken the siege of Rhodes in 305[124] and since this date fits the date for the establishment of the Roman-Rhodian contact, it is tempting to see some connection between the pirates and the beginnings of Rome's association with the island.[125] I do not mean to imply that Rome was meddling in eastern politics at such an early date but merely wish to point out that Roman contacts with extra-Italic territories kept abreast with her domestic and military advancement in the fourth century and

---

Dionysius, XX. 4. 8; Cassius Dio, frag. 40. 6; Zonaras, 8. 8; Strabo, VI. 2. 3 (268), are incorrect: Samnites were meant instead. She does not prove her case and makes too much of Diodorus' failure to mention Campanians.

[121] Scullard, *Roman World*, p. 118, n. 2, said: "Possibly Agathocles had relations with Rome, though this is nowhere expressly stated." This possibility is also mentioned by Spaeth, *Rome's Wars*, p. 61 (especially n. 37) and Cary, *CAH* VII, p. 635. It is not always clear whether the authorities meant friendly or hostile relations. Spaeth certainly meant the latter.

[122] Strabo, V. 3. 5 (232).

[123] Polybius, XXX. 5. 6; cf. Livy, XLV. 25. 9–10.

[124] Diodorus, XX. 82–88, XX. 91–100; Plutarch, *Demetrius* 21–22.

[125] Cassola, *I gruppi politici romani*, pp. 28–30, suggested such a connection. F. W. Walbank, "Polybius and Rome's Eastern Policy," *JRS* 53 (1963), pp. 2–3, is only the latest of the many scholars to collect the evidence for Roman activity with the East at such an early date. Although he does not place much significance in such evidence, he does admit that, "occasional Romans, or Italians using the Roman name, were active in eastern waters from the fourth and third centuries; and one would expect early Rome to share the Etruscan contacts with Greece. Naturally too the Hellenistic world had heard of Rome: Italy was not *ultima Thule*."

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

offer ample proof that Roman power and interests were at least a potential threat to Carthage at a time when Agathocles presented a formidable danger to Punic interests.[126] We do not know if Agathocles and Rome were on friendly terms or not, but it seems more than coincidental that one year after the Etruscans gave assistance to Agathocles, Carthage concluded a treaty with Rome concerning relative spheres of influence.[127]

In conclusion, Rome was too active both in Italy and in the Mediterranean in the last quarter of the fourth century to neglect such a vital factor in her development as her coinage. Indeed, Rome could not have extended her influence into these areas without acquiring numismatic sophistication in the process. The widening gulf between Rome and Carthage precludes any possibility that the latter was an instrumental agent in the introduction of Roman coinage. Instead, the extension of Roman influence into South Italy, an area long accustomed to coined money, was the source of such sophistication.

[126] Both Scullard, *Roman World*, p. 114, and Cary, *JRS* 1919, p. 76, have strongly emphasized this very point.
[127] It is significant that Carthage also reached an agreement with Agathocles in this same year (306). See Diodorus, XX. 79. 5; Justin, XXII. 8. 15.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

VETTIENUS MONETALIS

J. R. Jones

Vettienus is known to us only from eight references in Cicero's letters to Atticus.[1] Here he is mentioned in connection with various business transactions, and on one occasion an obscure witticism is directed against him.[2] Cicero writes:

> "I am sure that Vettienus is, as you say, a friend of mine. I did make a slightly offensive joke at his expense, because he had written to me in a curt manner about attending to the money, and you will put this right with him, if he has taken it in the wrong way—I addressed the letter to him as 'Monetalis,' because he wrote to me as 'Proconsul.' But since he is a good fellow and well disposed toward me, I want to stay on good terms with him."

Why did Cicero salute Vettienus as "Monetalis," and then consider that this was something at which he might take offence? It has been suggested that he was a mint magistrate, and if this is the right answer the passage is of some importance, since it would provide the only good evidence available to us for the existence of a Republican moneyer who appears not to have had any coins struck in his name.[3]

Vettienus has, it seems, caused annoyance by showing an indelicate abruptness in asking for a debt to be settled (this may well have been the piece of business referred to in an earlier letter, *Att.* X. 5.3,

[1] *Att.* X. 5.3; 11.5; 13.2; 15.4 (all of 49 B.C.). XII. 3.2 (46 B.C.) XV. 13.3; 13.5 (13a.1); 20.1 (all of 44 B.C.).

[2] *Att.* X. 11. 5: Vettienum mihi amicum, ut scribis, ita puto esse. Cum eo, quod ἀποτόμως ad me scripserat de nummis curandis, θυμικώτερον eram iocatus; id tu, si aliter accepit ac debuit, lenies. MONETALI autem ascripsi, quod ille ad me PRO COS; sed quoniam est homo et nos diligit, ipse quoque a nobis diligatur.

[3] Accepted most recently by H. Mattingly, Roman Coins[2] (London, 1960), p. 29, and K. Pink, *The Triumviri Monetales and the Structure of the Coinage of the Roman Republic* (New York, 1952), pp. 54–5.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

where he had been acting as agent for Cicero in the purchase of a *deversorium* or small country house to be used as a halting place on journeys). Cicero, when replying, has made a joke at his expense by matching the PRO COS which appeared after his name in the prescript of Vettienus' letter with the salutation, as we may imagine it, VETTIENO MONETALI. It should be noticed that Cicero does not say that he is angry at having been given the title of proconsul. It would have been more proper at this time to call him "Imperator," since in 49 he had been assigned to command the forces in Capua and its neighborhood, and he conscientiously adheres to this title in his own letters. But the question of titulature is only a peg on which to hang his joke; it is the ungentlemanly sharpness of Vettienus' request which has caused him to take offence in the first place, not a lapse from protocol.

If Vettienus was in fact a mint magistrate at the time, it is hard to see why the title "Monetalis" should have been regarded as an insult. The suggestion of Barthélemy,[4] that Cicero is sneering at him because he has attained only the lowest rung on the ladder of the *cursus honorum*, will not do. Although we have very little information about the moneyers of the Republic, the appearance of their names on the coins struck during their term of office, and the fact that under the Empire this was the position in the Vigintivirate most likely to lead to the coveted consulship and to subsequent positions of distinction,[5] should encourage us to assume that even from the first it was a position of honor; and the *cursus* of the later Republic, with offices held at the due age, or approximately so, and in ascending order, was not the sort of system under which an official of high rank would despise a junior for not having risen higher.

[4] *RN* 1847, pp. 350ff., quoted by Pink, *Triumviri Monetales*, p. 55.

[5] Imperial *commendatio* to senatorial magistracies was in general reserved for senators whose service in the vigintivirate had been either as *IIIviri a.a.a.f.f.*, or as *Xviri stlitibus iudicandis*. *IVviri viarum curandarum* and *IIIviri capitales* were obviously of lower standing. This principle has been shown to apply even more forcibly by E. Birley, "Senators in the Emperor's service," *Proc. Brit. Acad.* 39 (1953), pp. 197–214, where it is noted that "hardly a single plebeian who served as *IIIvir monetalis* failed to rise to a consular command." See also D. McAlindon, "Entry to the Senate in the Early Empire," *JRS* 1957, pp. 191–195, and H. Dessau, "A Roman Senator under Domitian and Trajan," *JRS* 1913, pp. 301–309.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A suggestion more worthy of attention is that Vettienus may have been a mint magistrate in a previous year, and that Cicero was thus taking his revenge for having been given an out-of-date title. That the joke would be a very weak one does not necessarily invalidate this interpretation. But it does demand above all that a full and correct titulature should be used, and here we are faced with the problem that we have no evidence for "monetalis" as a title by itself: the proper wording would have been VETTIENO IIIVIRO, perhaps with A.A.A.F.F. or MONETALI attached, but the latter word is never anything but an adjective, as may be seen from the variations in titulature noted by Mommsen[6] and Pink.[7] Lenormant's explanation,[8] that "monetalis," without the title of "triumvir," was an insult because it was intended to have overtones of "mint-worker" is also unsatisfactory: the latter is always "monetarius" in Latin. Nor should we be deceived by Schütz's emendation of a later letter to Atticus,[9] where Cicero again refers to Vettienus, and complains that he is holding up business. "Tricatur scilicet ut homo talis" is the manuscript reading, and although the alteration of the last two words to "monetalis" has been accepted by subsequent editors, it should not be allowed to stand. "Just the sort of fellow he is" makes good sense in the circumstances, while "like the moneyer he is" not only presupposes a form of the title for which there is no other evidence, but forces us to assume that in 44 B.C., five years after the first reference to Vettienus in these terms, he was still labelled in this way. As a final piece of evidence for the correct usage of Cicero's time, there is his joke about the Treviri,[10] where his phrasing would have been neater if he had used "monetales" to match his pun on "capitales;" but he keeps to the official form of the title.

The best interpretation of Cicero's piece of humor is that he is replying to Vettienus by giving him a mock title which has the flavor of an official salutation, but is not one in fact; it suggests only that

[6] *Römisches Staatsrecht*, Vol. 2, p. 602, note 3.
[7] Triumviri Monetales, p. 8.
[8] *La monnaie dans l'antiquité*, vol. 3, p. 163.
[9] *Att.* XV. 13.5 (13a.1).
[10] *Fam.* VII. 13.2: Treviros vites censeo: audi capitales esse; mallem auro aere argento essent.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

he is too interested in money, "Vettienus the Money-Man."[11] In that case the joke, which is indeed moderately funny, would have been much less so if Vettienus had really been one of the mint magistrates, and we should do better to classify him as one of Cicero's equestrian acquaintances of Italian origin, not of a senatorial background.[12] It is therefore not proper to refer to him as an example of a moneyer who is not known to have struck coins.[13]

[11] This interpretation is preferred by Gundel, *RE* VIIIA², 1841–2.

[12] W. Schulze, *Zur Geschichte der lateinischer Eigennamen* (Berlin, 1933), p. 101, note 4 and p. 104, lists variant spellings. The name would appear to be of "Osco-Umbrian" rather than "Roman" origin, but no further enlightenment can be gained from it. The statement of Purser & Tyrrell, *The Correspondence of Cicero*, 5, p. 347 and 6, p. 21, that he was "a banker of Puteoli," rests on no evidence, and is certainly, as Gundel suggestests, the result of confusing his name with that of Vestorius; but nevertheless this is the sort of person that he probably was.

[13] Since the above was written, it has been possible to consult the latest volumes of the edition of the *Letters to Atticus* by D. R. Shackleton Bailey (Cambridge, 1965—); this editor will not allow Vettienus to have been a mint magistrate, although he retains the emendation *monetalis* in XV.13.5.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

ROMAN AND BYZANTINE MEDALLIONS IN THE COLLECTION OF THE AMERICAN NUMISMATIC SOCIETY

(PLATES VII–XVIII)

JOAN M. FAGERLIE

With the recent bequest of Adra M. Newell that contained eight medallions and with other accessions made in the past few years, the Society's collection of Roman and Byzantine medallions now totals forty-three pieces. Several of these are apparently unique: No. 7 of Lucilla, Nos. 22 and 25 from the Arras hoard and No. 39 of Valentinian I. Others are variants of published types: No. 1 of Antoninus Pius, No. 23 of Diocletian, No. 29 of Constantine I and No. 35 of Constantius Gallus. Of special interest also is the gold medallion of Magnentius, No. 37. Many of the medallions have been published previously in various places but it seemed worthwhile to bring them all together now in one place. Since every piece is illustrated, descriptions have been kept to a minimum. References are to Gnecchi, Cohen and *Roman Imperial Coinage* and to publications where these particular pieces have appeared. The abbreviations used are as follows:

Baldwin, *NNM* 17 — Agnes Baldwin, *Six Roman Bronze Medallions* (*Numismatic Notes and Monographs* No. 17), New York, 1923.

Baldwin, *NNM* 28 — Agnes Baldwin, *Four Medallions from the Arras Hoard* (*Numismatic Notes and Monographs* No. 28), New York, 1926.

Bastien — P. Bastien, *Magnence* (*350–353*), Wettern, 1964.

Bellinger — Alfred R. Bellinger, "Roman and Byzantine Medallions in the Dumbarton Oaks Collection," *Dumbarton Oaks Papers* 12, 1958, 125–156.

BMC — Coins of the Roman Empire in the British Museum (6 vols., London, 1920–62).

Boyce — A. A. Boyce, "A Medallion of Caracalla," *Museum Notes* I, 1946, 45–57.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Cohen — Henry Cohen, *Description historique des monnaies frappées sous l'empire romain* (8 vols., 2nd ed., Paris, London, 1880–92).
Gnecchi — Francesco Gnecchi, *I Medaglioni Romani* (3 vols., Milan, 1912).
Mosser — Sawyer McA. Mosser, "Four Roman Medallions and a Bronze of Apamea in Phrygia," *Museum Notes* I, 1946, 65–72.
NK — Numizmatikai Közlöny.
RIC — Roman Imperial Coinage.
Sartiges Coll. — *Collection du Vicomte de Sartiges* [D. A. Longuet, Paris, n. d.].
Toynbee — Jocelyn M. C. Toynbee, *Roman Medallions* (*Numismatic Studies* No. 5), New York, 1944.

ANTONINUS PIUS (A.D. 138–161)

1. Æ 42.01 gr. ↑ A.D. 140–144

Obv.: ANTONINVS AVG PIVS PP TR P COS [III]
Bust r., laureate and cuirassed.

Rev.: [NA]VIVS in ex.
Augur Attus Navius cutting the whetstone in the presence of Tarquinius Priscus (cf. Livy I.36).[1]

Ex E. T. Newell Coll.
Gnecchi II, p. 13, 32–33 var.; Cohen 567 var.

2. Æ 39.10 gr. ↑ hammered into a contorniate. A.D. 154–155

Obv.: ANTONINVS AVG PIVS PP TR P XVIII
Bust r., laureate, draped and cuirassed.

Rev.: COS IIII
Hercules nude, seated facing on rock covered with lion's skin, holding club in r. hand; shield and cuirass to r.

Ex E. T. Newell Coll.
Gnecchi II, p. 11, 17; Cohen 215.

[1] A series of medallions depicting legendary scenes from Rome's past was issued by Antoninus Pius between 139–147 in preparation for the celebration of the nine hundreth anniversary of the founding of Rome in the year 147. Cf. Toynbee, p. 143.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

MARCUS AURELIUS (A.D. 161–180)

3. Æ 55.52 gr. ↑ A.D. 163–164

Obv.: M AVREL ANTONINVS AVG PM IMP II TR P XVIII COS III
Bust l., cuirassed.

Rev.: No legend. Female figure standing beneath tree on l., facing r., leaning on table and feeding snake entwined about statuette of Salus which is on top of the table; a vase is on table at l. and a garland hangs down from table; a bird rests on cross-bar between table legs.

Ex Pierpont Morgan Coll. = Sambon Cat. Nov. 18, 1907, no. 2172 (Martinetti-Nervegna Coll.); Baldwin, *NNM* 17, no. 2.
Gnecchi II, p. 37, 81 and pl. 66, 3 (this specimen); Cohen 1050 var.

4. Æ 48.74 gr. ↑ A.D. 174–175

Obv.: M ANTONINVS AVG TR P XXIX
Bust r., laureate and cuirassed; cuirass ornamented with head of Medusa.

Rev.: IMP VII COS III
Victory seated l., holding shield on which VIC; trophy to r. AVG

Ex Adra M. Newell Coll.
Gnecchi II, p. 28, 14; Cohen 323.

LUCIUS VERUS (A.D. 161–169)

5. Æ 42.84 gr. ↑ A.D. 166

Obv.: L VERVS AVG ARM PARTH MAX
Bust r., laureate, draped and cuirassed.

Rev.: TR P VI IMP IIII COS II
Lucius Verus in military dress, standing on platform addressing the troops.

Ex Pierpont Morgan Coll. = Sambon Cat. Nov. 18, 1907, no. 2254 (Martinetti-Nervegna Coll.); Baldwin, *NNM* 17, no. 3; Toynbee, pl. XLII, 4.
Gnecchi II, p. 46, 14; Cohen 288.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

LUCILLA (*Wife of L. Verus*)

6. Æ 48.91 gr. ↑ A.D. 164–169 or later[2]
Obv.: LVCILLAE AVG ANTONINI AVG F
Bust r., draped.
Rev.: VENVS
Venus standing facing, head l., holding sceptre in l. hand and placing r. hand on shoulder of Cupid; altar to r.

Baldwin, *NNM* 17, no. 5.
Gnecchi II, p. 50, 5; Cohen 76.

7. Æ 47.32 gr. ↑ A.D. 164–169 or later
Obv.: As above.
Rev.: No legend. Lucilla standing on l. handing a group statuette of the Three Graces to Vesta who is seated on throne at r. with a sceptre in l. hand.

Ex Pierpont Morgan Coll. = Sambon Cat. Nov. 18, 1907, no. 2277 (Martinetti-Nervegna Coll.); Baldwin, *NNM* 17, no. 4; Toynbee, pl. XLII, 5.
Gnecchi II, p. 51, 10 (this specimen); Cohen not.

8. Æ 42.60 gr. ↑ A.D. 164–169 or later
Obv.: As above.
Rev.: No legend. Six Vestals sacrificing at altar in front of temple of Vesta.

Ex E. T. Newell Coll. = L. Hamburger Cat. May 27, 1929, no. 1252 (von Kaufmann Coll.).
Gnecchi II, p. 51, 13; Cohen 105.

COMMODUS (A.D. 180–192)

9. Æ 23.05 gr. ↑[3] A.D. 178–179 under Marcus Aurelius

[2] Nos. 6–8 bear the long obverse legend and reverse types that probably belong to the period after the death of Lucius Verus in 169. Cf. *BMC* IV, pp. cxxxiiif., cxlviii.
[3] The outer area of this medallion containing the legend has been trimmed away. Gnecchi states that it was originally bi-metallic but lacks the outer rim.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv.: [L AVREL COMMODVS AVG GERM SARM TR P III]
Bust r., laureate, draped and cuirassed.
Rev.: [IMP II COS PP]
Emperor and other figures in sacrificial scene in front of temple; [VOTA PVBLICA] in ex.

Ex E. T. Newell Coll. = Hess Cat. May 22, 1935, no. 1890 (Trau Coll.).
Gnecchi II, p. 70, 166; Cohen 977.

10. Æ 34.87 gr. ↑ A.D. 186
Obv.: M COMMODVS ANTONINVS PIVS FELIX AVG BRIT
Bust r., laureate, draped and cuirassed.
Rev.: PM TR P XI IMP VII
Emperor in quadriga r.; COS V PP in ex.

Ex E. T. Newell Coll. = Hamburger Cat. Oct. 19, 1925, no. 1146.
Gnecchi II, p. 61, 89 var.; Cohen 509.

11. Æ 54.25 gr. ↑ A.D. 188–189
Obv.: M COMMODVS ANTONINVS PIVS FELIX AVG BRIT
Bust l., laureate, draped and cuirassed.
Rev.: MINER VICT PM TR P XIIII IMP VIII
Minerva standing front, facing l., holding Victory in r. hand, spear in left; trophy to r.; COS V PP in ex.

Ex Adra M. Newell Coll. = Santamaria Cat. June 18, 1928, no. 414 (Larizza Coll.).
Gnecchi II, p. 57, 51; Cohen 368.

CARACALLA (A.D. 211–217)

12. Æ 59.48 gr. ↑ A.D. 196 under Septimius Severus
Obv.: M AVRELIVS ANTONINVS CAES
Bust r., draped and cuirassed.
Rev.: SEVERI AVG PII FIL
Lituus, knife, patera, urceus, simpulum and aspergillum l. to r. on exergual line.

Ex Münzhandlung Basel Cat. No. 8, Mar. 23, 1937, no. 883 =

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Naville Cat. XVII, Oct. 3, 1934, no. 1576; Boyce, pp. 45ff. Gnecchi II, p. 77, 6; Cohen 584.

SEVERUS ALEXANDER (A.D. 222–235)

13. Æ 55.14 gr. ↑ A.D. 226

Obv.: IMP CAES M AVREL SEV ALEXANDER PIVS FELIX AVG
Bust l., laureate, draped and cuirassed.

Rev.: PONTIF MAX TR P V COS II PP
Emperor in quadriga r., holding eagle-headed sceptre and being crowned by Victory.

Ex Adra M. Newell Coll. = Naville Cat. X, June 15, 1925, no. 1765 (Petrowicz-Rogers Coll.) = J. Hirsch Cat. XXIX, Nov. 9, 1910, no. 1221 = Sotheby Cat. June 29, 1893, no. 230 (Hermann D. Weber Coll.).
Gnecchi II, p. 82, 21; Cohen 481.

GORDIAN III (A.D. 238–244)

14. Æ 47.67 gr. ↑ A.D. 242

Obv.: IMP GORDIANVS PIVS FELIX AVG
Bust l., laureate, draped and cuirassed.

Rev.: VICTORIA AVG
Temple with four columns; ΝΕΙΚΗ on pediment; ΟΠΛΟ-ΦΟΡΟC on frieze; emperor and other figures in sacrificial scene in front of temple.

Ex Pierpont Morgan Coll. = Sambon Cat. Nov. 18, 1907, no. 2668 [pl. = 2268] (Martinetti-Nervegna Coll.); Baldwin, *NNM* 17, no. 6.
Gnecchi II, p. 92, 50 (this specimen); Cohen 370.

OTACILIA, PHILIP I AND II (A.D. 244–249)

15. Æ 37.15 gr. ↑ A.D. 248

Obv.: MARCIA OTACIL SEVERA AVG
Bust r., draped and wearing stephane.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: PIETAS AVGVSTORVM
Confronting busts of Philip I and II, both laureate, draped and cuirassed; III ET II COS in ex.

Ex Naville Cat. XVIII, Oct. 10, 1938, no. 405 = *Sartiges Coll.*, pl. XXXVIII, 326 = J. Hirsch Cat. XXIV, May 10, 1909, no. 2168 (Consul Weber Coll.); Mosser, p. 66.
Gnecchi II, p. 100, 2; Cohen p. 159, 4.

VALERIAN AND GALLIENUS (A.D. 253–260)

16. Æ 6.65 gr. ↓ A.D. 253
Obv.: CONCORDIA AVGVSTORVM
Confronting busts of Valerian (on r.) and Gallienus (on l.); both laureate, Valerian draped and cuirassed, Gallienus cuirassed.
Rev.: LIBERALITAS AVGG
The two emperors seated on curule chairs on platform; two figures behind them; Liberalitas on l. with cornucopiae and tessera; another figure approaches the platform.

Ex Naville Cat. XVIII, Oct. 10, 1938, no. 430 = *Sartiges Coll.*, pl. XXXIX, 358; Mosser, p. 67.
Gnecchi III, p. 52, 6; Cohen 6; *RIC* V, p. 62, 5.

GALLIENUS (A.D. 253–268)

17. Æ 20.30 gr. ↓ A.D. 258
Obv.: IMP GALLIENVS PF AVG
Bust r., laureate and cuirassed.
Rev.: MONETA AVGG
The Three Monetae.

Gnecchi III, p. 53, 47; Cohen 664; *RIC* V, p. 86, 227.

FLORIAN (A.D. 276)

18. Æ 26.23 gr. ↓ A.D. 276
Obv.: IMP C M ANN FLORIANVS P AVG
Bust r., laureate, draped and cuirassed.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: MONETA AVG
The Three Monetae.

Ex Naville Cat. XVIII, Oct. 10, 1938, no. 458 = *Sartiges Coll.*, pl. XLI, 380 = J. Hirsch Cat. VIII, May 18, 1903, no. 2654; Mosser, p. 68.
Gnecchi II, p. 115, 3; Cohen 43.

PROBUS (A.D. 276–282)

19. Æ 30.79 gr. ↓ pierced and refilled.
Obv.: IMP PROBVS PF AVG
Bust l., laureate, cuirassed, holding shield and spear.
Rev.: MONETA AVG
The Three Monetae.

Ex E. T. Newell Coll. = J. Hirsch Cat. XXX, May 11, 1911, no. 1235 (Percy Barron Coll.) = J. Hirsch Cat. XI, May 4, 1904, no. 1111 = L. Hamburger Cat., Oct. 15, 1890, no. 1712 = Sotheby Cat. Mar. 15, 1897, no. 660 (Montagu Coll.).
Gnecchi II, p. 118, 24; Cohen 376.

20. Æ 41.20 gr. ↑
Obv.: IMP PROBVS AVG
Bust r., laureate and cuirassed; cuirass ornamented with head of Medusa; holding eagle-headed sceptre in l. hand.
Rev.: MONETA AVG

The Three Monetae.

Ex Naville Cat. XVIII, Oct. 10, 1938, no. 461 = *Sartiges Coll.*, pl. XLI, 383 = J. Hirsch Cat. XXIV, May 10, 1909, no. 2405 (Consul Weber Coll.).
Gnecchi II, p. 117, 16; Cohen 371.

CARINUS (A.D. 283–285)

21. Æ 24.37 gr. ↑
Obv.: IMP C M AVR CARINVS PF AVG
Bust r., laureate, draped and cuirassed.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: MONETA AVGG
The Three Monetae.

Ex Naville Cat. XI, June 18, 1925, no. 964 (Levis Coll.).
Gnecchi II, p. 121, 2; Cohen 55.

DIOCLETIAN AND GALERIUS
MAXIMIAN AND CONSTANTIUS CHLORUS
(A.D. 293–305)

22. *AV* 54.45 gr. (10 aurei) ↓ Trier, ca. A.D. 293–294
Obv.: DIOCLETIANVS AVG ET MAXIMIANVS C
Confronting busts of Diocletian and Galerius, both laureate and wearing imperial mantle.
Rev.: MAXIMIANVS AVG ET CONSTANTIVS C
Confronting busts of Maximian and Constantius Chlorus as on obv.

Ex Adra M. Newell Coll.; Baldwin, *NNM* 28, p. 28, no. 4 (Arras Hoard); Toynbee, pl. VIII, 2.
Gnecchi not; Cohen not; *RIC* VI, p. 163, 2.

DIOCLETIAN (A.D. 284–305)

23. *Æ* 47.41 gr. ↑ pierced.[4]
Obv.: IMP C C VAL DIOCLETIANVS PF AVG
Bust r., laureate, cuirassed, holding eagle-headed sceptre in l. hand.
Rev.: IOVI CONSERVATORI AVG
Temple with six columns; emperor and other figures in sacrificial scene in front of temple.

Ex E. T. Newell Coll.
Gnecchi II, p. 124, 9 (this specimen); Cohen 275 var.

24. *Æ* 32.20 gr. ↓
Obv.: IMP C C VAL DIOCLETIANVS PF INVI AVG
Bust r., laureate, draped and cuirassed.

[4] This piece appears to consist of two bronze halves with an iron core between; pierced before the medal was split.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: MONETA AVGG
The Three Monetae.

Ex Max Schlesinger Fixed Price List No. 2, 1936, no. 649 (Baranoff Coll.) = J. Hirsch Cat. XXIV, May 10, 1909, no. 2455 (Consul Weber Coll.).
Gnecchi II, p. 126, 24; Cohen 333.

CONSTANTIUS CHLORUS AND GALERIUS (A.D. 293–305)

25. *AV* 54.31 gr. (10 aurei) ↑ Rome, A.D. 293
Obv.: DD NN CONSTANTIO ET MAXIMIANO NOBB CAESS
Confronting busts of Constantius Chlorus (on l.) holding globe surmounted by Victory and Galerius (on r.) holding eagle-headed sceptre; both laureate and wearing imperial mantle.
Rev.: PRINCIPVM IVVENTVTIS
The two emperors standing in military dress, sacrificing over altar; behind, two military standards; PROM in ex.

Ex E. T. Newell Coll.; Baldwin, *NNM* 28, p. 12, no. 1 (Arras Hoard); Toynbee, pl. IX, 4.
Gnecchi not; Cohen not.

CONSTANTIUS CHLORUS (A.D. 293–306)

26. *Æ* 22.19 gr. ↓ A.D. 293–305 as Caesar
Obv.: FL VAL CONSTANTIVS NOB C
Bust r., laureate, draped and cuirassed.
Rev.: MONETA AVGG
The Three Monetae.

Ex E. T. Newell Coll.
Gnecchi II, p. 130, 3; Cohen 192.

CONSTANTINE I (A.D. 307–337)

27. *AV* 5.33 gr. ↓ Thessalonica, A.D. 325
Obv.: CONSTANTINVS MAX AVG
Head r., diademed.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: VOTIS in wreath; TSE in ex.
XXX

Ex Adra M. Newell Coll. = J. Hirsch Cat. XXIV, May 10, 1909, no. 2599 (Consul Weber Coll.).
Gnecchi I, p. 21, 66; Cohen not; *RIC* VII, p. 527, 207.

28. *Æ* 6.67 gr. ↓ Thessalonica, A.D. 327
Obv.: No legend. Head r., looking upward.
Rev.: GLORIA CONSTANTINI AVG
Emperor in military dress, advancing r., trophy across l. shoulder; transverse spear in r. hand; to l. and r., a seated captive; SMTS in ex.
Gnecchi I, p. 17, 23; Cohen 238; *RIC* VII, p. 520, 163.

29. Æ 33.59 gr. ↓ A.D. 325
Obv.: CONSTANTINVS PF AVG
Bust r., laureate, draped and cuirassed.
Rev.: VICTORIA CONSTANTINI AVG
Victory seated r. on cuirass, inscribing VO / TIS / XXX on shield.
Ex E. T. Newell Coll.
Gnecchi II, p. 135, 17 var; Cohen 612 var.

CONSTANS (A.D. 337–350)

30. *Æ* 13.24 gr. ↓ Siscia, A.D. 337–338
Obv.: FL IVL CONSTANS PF AVG
Bust r., diademed, draped and cuirassed.
Rev.: GAVDIVM POPVLI ROMANI
SIC / V / SIC / X in laurel wreath; SIS⌣ in ex.

Ex Adra M. Newell Coll. = Naville Cat. VIII, June 25, 1924, no. 1505 (Clarence S. Bement Coll.) = J. Hirsch Cat. XXIX, Nov. 9, 1910, no. 1417; Toynbee, pl. XIII, 11.
Gnecchi I, p. 62, 7 var.; Cohen 34.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

31. Æ 24.84 gr. ↑
Obv.: CONSTANS PF AVG
Bust r., diademed, draped and cuirassed.
Rev.: VIRTVS AVG
Emperor standing r., with spear and globe; captive at his feet.

Ex J. Hirsch Cat. XXIX, Nov. 9, 1910, no. 1432.
Gnecchi II, p. 145, 23; Cohen 180.

CONSTANTIUS II (A.D. 337–361)

32. Æ 5.48 gr. ↓ Thessalonica, A.D. 347
Obv.: CONSTANTIVS AVGVSTVS
Bust r., diademed, draped and cuirassed; wreath border.
Rev.: VICTORIAE DD NN AVGG
Victory seated r. on cuirass, inscribing VOT XX MVLT XXX on shield;
Cupid to r., wreath border; TES in ex.

Gnecchi I, p. 33, 46; Cohen 281.

33. Æ 18.74 gr. ↑ A.D. 341–342
Obv.: CONSTANTIVS PF AVG
Bust r., diademed, draped and cuirassed.
Rev.: VICTORIA AVG NN
Victory seated r., on cuirass, inscribing VOT X on shield.

Ex E. T. Newell Coll.
Gnechi II, p. 148, 24; Cohen 206.

34. Æ 12.94 gr. ↓ Rome
Obv.: DN CONSTANTIVS PF AVG
Bust r., diademed, draped and cuirassed.
Rev.: MONETA AVGG
The Three Monetae; R in ex.

Ex E. T. Newell Coll.
Gnecchi II, p. 147, 11; Cohen 144.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

CONSTANTIUS GALLUS (A.D. 354)

35. Æ 5.18 gr. ↓ Thessalonica, A.D. 354

Obv.: DN CONSTANTIVS NOB CAES
Head r.

Rev.: VIRTVS EXERCITVS
Three military standards; TES in ex.

Gnecchi I, p. 72, 5 var.; Cohen 50 var.

MAGNENTIUS (A.D. 350–353)

36.[5] *AV* 13.45 gr. ↑ Aquileia, A.D. 351

Obv.: IMP CAES MAGNENTIVS AVG
Bust r., draped and cuirassed.

Rev.: LIBERATOR REIPVBLICAE
Emperor on horse r., greeted by kneeling woman with turreted crown; SMAQ in ex.

Gnecchi I, p. 33, 1; Cohen 26; Bastien 302.

37. Æ 15.84 gr. ↓

Obv.: IMP CAE MAGNENTIVS AVG
Bust r., draped and cuirassed.

Rev.: VICTORIA AVGVSTORVM
Victory walking l., wreath in r. hand and palm in l.; ? in ex.

Ex E. T. Newell Coll. = Helbing Cat. 20, Mar. 22, 1926, no. 397.
Gnecchi II, p. 154, 7; Cohen 63.

JOVIAN (A.D. 363–364)

38. Æ 8.09 gr. ↓ Constantinople

[5] This medallion was previously known only from a cast of the specimen in the Bibliothèque Nationale that was stolen in 1831 and presumably melted down. In 1959 and 1961, two new examples appeared in auction sales (Münzen und Medaillen Cat. XIX, June 5–6, 1959, no. 270; Hess/Leu Cat. March 23, 1961, no. 434) and in 1967 we acquired a third piece. All are apparently from a hoard found in Yugoslavia in 1956 which contained at least 12 gold multiples of Magnentius. Cf. Aleksander Jeločnik, "Les multiples d'or de Magnence découverts à Emona," *Revue Numismatique* 1967, 209–35.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv.: DN IOVIANVS PF AVG
Bust r., diademed, draped and cuirassed.
Rev.: VICTORIA ROMANORVM
Emperor in military dress, holding labarum in r. hand and Victory on globe in l.; CONSPΓ in ex.

Gnecchi not; Cohen 22.

VALENTINIAN I (A.D. 364–375)

39. *Ⱥ* 28.80 gr. ↓ with loop and beaded border.
Thessalonica, A.D. 367–375
Obv.: DN VALENTINIANVS PF AVG
Bust l., diademed, draped and cuirassed.
Rev.: VICTORIA DN AVGVSTI
Emperor standing in military dress, holding labarum in r. hand and being crowned by Victory; captive below to l.; TESOB in ex.

Ex Adra M. Newell Coll.; Toynbee, pl. XXXI, 4; *NK* 1929–30, p. 10 and pl. 3a, 10 (prov. Nedzierzewo by Kalisch).
Gnecchi not; Cohen not; *RIC* IX, p. 177, 19.

VALENS (A.D. 364–378)

40. Æ 9.46 gr. ↓ Aquileia
Obv.: DN VALENS PF AVG
Bust r., diademed, draped and cuirassed.
Rev.: RESTITVTOR REIPVBLICAE
Emperor standing in military dress, holding labarum in r. hand and Victory on globe in l.; SMAQP in ex.

Gnecchi not; Cohen 40.

HONORIUS (A.D. 395–423)

41. Æ 13.09 gr. ↓ Rome
Obv.: DN HONORIVS PF AVG
Bust r., diademed, draped and cuirassed.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: TRIVMFATOR GENT BARB
Emperor standing in military dress, holding labarum in r. hand, globe in l.; captive below to l.; RMPS in ex.

Ex Adra M. Newell Coll. = J. Schulman Cat. Mar. 5, 1923, no. 2884 (Vierordt Coll.) = J. Hirsch Cat. XXIV, May 10, 1909, no. 2798 (Consul Weber Coll.) = Rollin and Feuardent Cat. May 14, 1888, no. 2261 (de Quelen Coll.).

Gnecchi I, p. 82, 5; Cohen 34.

JUSTIN I (A.D. 518–527)

42. Æ 12.13 gr. ↓ Constantinople
Obv.: DN IVSTINVS PP AVG
Bust r., diademed, draped and cuirassed.
Rev.: VOT / XXXX / MVST / XXXX in wreath; CONOB in ex.

Ex E. T. Newell Coll.; Cf. Bellinger, p. 152, no. 44.

43. Æ 11.96 gr. ↓
Same dies as above (?).

Ex E. T. Newell Coll.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

AN ALEXANDER/MACEDONIA CONTORNIATE

(PLATE XIX)

EUGENE DWYER

The publication of a magnificently preserved contorniate in the Vatican Collection should clear up an old, unsolved problem connected with the series.[1] On the obverse is the portrait of Alexander-Hercules with the inscription ALEXXAN-DER MAG; on the reverse is a solitary seated figure with the inscription NUS MAGCO-NMONI-MUS (PLATE XIX, 3). The seated figure reverse type (Alföldi no. 227) has never been properly identified.[2] Sabatier described him as follows: "Personnage assis à droite sur un rocher, la tête nue, tournée en arrière et appuyée sur sa main gauche; l'autre main est ramenée sur les genoux. Cette figure semble plongée dans la tristesse ou bien dans une profonde méditation."[3] Others have added the observation that the figure appeared to be wearing a laurel crown.[4] This last point is now refuted by the Vatican specimen, which shows the figure to be wearing a *pilleus*, or, more correctly, a *causia*, the national headdress of Macedonia.[5] Such a headdress along with the full Macedonian costume can be seen, for example, on a piece from the "Restitutor" series of Hadran (PLATE XIX, 4).[6] The attitude of the figure on the contorniate is familiar from fourth-century imperial coinage, where such figures represent captive barbarians, and indicate the conquests (or the ability to conquer) of the emperor and his armies.[7] The central positioning of the figure, however, is more reminiscent of the province series of Trajan and Hadrian.

[1] L. Michelini Tocci, *I Medaglioni Romani e i Contorniati del Medagliere Vaticano* (Vatican City, 1965), p. 196, pls. 38, 2 and 61, 2.

[2] For a partial bibliography of some attempts at interpretation, see Alföldi, *Die Kontorniaten* (Leipzig, 1942), p. 128, n. 63.

[3] Sabatier, *Médaillons Contorniates* (Paris, 1860), p. 102.

[4] E.g., Ad. de Longpérier, *RN* 1865, pp. 406ff.; Alföldi, *Kontorniaten*, p. 128.

[5] J. M. C. Toynbee, *The Hadrianic School* (Cambridge, 1934), p. 122f.

[6] Niggeler Sale, Vol. III, 1277 (Münz. u. Med., Nov. 1967).

[7] E.g., (Constantine) VIRTUS EXERCIT, Cohen 693 v., 695 v., Mazzini, *Monete Imperiali Romane*, Vol. 5 (Milan, 1958), pp. 96f., pl. 28; (Constans) VIRTUS EXERCITUM, Cohen 191, Mazzini, *MIR* 5, 155, pl. 42; (Constantius II) VIRTUS AUG, Cohen 295 v., Mazzini, *MIR* 5, 182, pl. 48.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The reverse inscription, NUS MAGCO-NMONIMUS, may be explained in the light of the identification of the seated figure. All specimens known to me with this inscription were struck from a single die (reverse die A). It appears in combination with two obverse dies with a portrait of Alexander-Hercules (obverse dies A and B); an obverse with a portrait of Sallust; and several obverse dies with the portrait of a charioteer. The die record on page 96 shows that reverse A and obverse A were first employed together.

As may be seen, obverse die A appears only with reverse die A. At some point obverse A was discarded and a new obverse, B, was then cut (preserving the same erroneous spelling of Alexander's name) and used with reverse die A. The dies then became separated, and were each subsequently used with various other dies. When reverse A wore out it made no sense to cut another die with inscription NUS MAGCO-NMONIMUS, which, for reasons that I shall suggest, could not possibly be interpreted correctly. In its turn reverse die A fostered such unusual progeny as the variant die inscribed NAXIMACO-EUMONIMUS,[8] and the variant inscribed MACC-OMMO.[9] The ancient die cutters were obviously as baffled as recent scholars have been in the presence of the inscription NUS MAGCO-NMONIMUS. Since these ancient variants represent attempts to simplify, if not understand, the inscrutable complexity of the parent die, and since the obverse dies designed for combination with this parent die contain the corrupted legend, ALEXXAN-DER MAG, it is reasonable to assume that the reverse inscription, NUS MAGCO-NMONIMUS, is likewise a corruption of a meaningful name or phrase.[10]

[8] Sabatier, *Méd. Con.*, p. 103, pl. 16, 3, Alföldi, *Kontorniaten*, pl. 58, 3.

[9] Havercamp, *Dissertations de Alexandri Magni Numismate* (Leiden, 1722), p. 147, pl. 18.

[10] Such garbled inscriptions are not uncommon among contorniates. There is, for example, a remarkable specimen in Glasgow with the inscription ALEXANDROMA GNOAUGTRPPP on the obverse. The portrait (of Alexander) and part of the correct inscription have been combined with the last part of an inscription borrowed from a contorniate with the portrait of an emperor (Probably Nero, where the title TRPPP is common). In the case of NUS MAGCO-NMONIMUS (or NUS MACCO-NMONIMUS, if the transcription in *Museo Theupoli*, Vol. 2, p. 825 [Venice, 1736] is to be believed), perhaps the frequent appearance of the name DOMNINUS on other contorniates added to the confusion.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Earlier contorniates of Alexander had contained the inscription ALEXANDER MAGNUS MACEDON, either on the obverse or on the reverse.[11] It seems a plausible, though unusual suggestion, that the die cutter had intended, on the initial dies (A, A), to continue the legend of the obverse on the reverse. Quite probably the dies were intended to read ALEXAN-DER MAG/NUS MACEDONICUS. Somehow the reverse legend as well as the obverse legend became garbled in the process of cutting the die.

It is therefore suggested that the seated figure and the inscription of the reverse both refer to Alexander's Macedonian origin. Since the epithet *Macedon.* is frequently found on Alexander contorniates, the point does not seem to be strained. In addition, such an unsophisticated ionography would be more in keeping with the spirit of these later pieces. The fact that the attitude of the figure in Macedonian costume is taken from a context in which it would normally indicate subjugation would also speak for the die cutter's ignorance of sophisticated iconography as well as his deficiency in letters.

[11] Alföldi, *Kontorniaten*, nos. 1 ff., 35 ff., 46.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

OBVERSE A REVERSE A

1. ANS = E. T. Newell, Cahn 66 (May 9, 1930), 799; Hess (Mar. 1929), 994; Hirsch 18 (1907), 1831.
2. Vatican. Michelini Tocci, pl. 38, 1 = Alföldi, pl. 42, 6 (?).
3. M. Ratto (Jan. 19, 1956), 365 = Alföldi, pl. 42, 5 (?).
4. Münz u. Med. 28 (June 19–20, 1964), 492.
5. Alföldi, no. 13, pl. 47, 1 (Münzhandl. Basel).

OBVERSE B REVERSE A

1. Ratto (June 1926), 2809 = Hirsch 29 (1910), 1620.
2. Alföldi, no. 14 (Naples).

OBVERSE B VARIOUS REVERSES

1. Alföldi, pl. 58, 3, *Macedonia* NAXIMACO EUMONIMUS.
2. Alföldi, no. 16, pl. 42, 7 (Vienna) *no reverse* (i.e., tooled).
3. Alföldi, no. 15, pl. 42, 4 (Vienna, Munich, Naples) *Caesar riding over fallen lion.*

VARIOUS OBVERSES REVERSE A

1. Alföldi, no. 78, pl. 36, 5 (Berlin) *bust of Sallust* SALLUSTIUS AUTOR (Alföldi, obv. no. 35).
2. Alföldi, no. 359, pl. 36, 6 (Paris) *Charioteer* (Alföldi, obv. no. 121).

Original from UNIVERSITY OF MICHIGAN
Digitized by Google
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A NEW ANONYMOUS BRONZE OF CONSTANTINE X

(PLATE XIX)

ARTHUR F. JOHNSON

The anonymous Byzantine bronzes issued by the emperors from John I (A.D. 969–976) through Alexius I (A.D. 1081–1118) have been arranged in a logical sequence of issues by Margaret Thompson on the basis of the large number of overstrikes among the Byzantine coins found during the excavation of the Athenian Agora.[1] In addition, the Agora coins, together with other published overstrikes, provided Miss Thompson with evidence for the assignment of a number of the anonymous issues to specific emperors.[2]

In the case of her Class E,[3] however, the evidence indicated only that the issue fell between Constantine IX (A.D. 1042–1045) and Constantine X (A.D. 1059–1067) and Miss Thompson suggested Isaac I (A.D. 1057–1059) principally on the grounds of probability.[4] Class E was undoubtedly a minor issue; Miss Thompson recorded only 13 Agora specimens of which 3 were restruck, undertype uncertain in all cases. However, in her arrangement of the issues, Miss Thompson noted the published Class E over Class D specimen[5] and, since there were 23 specimens of Class F struck over Class E in the Agora, the sequential relationship is clear.

It is now possible to specifically attribute the Class E issue on the basis of new evidence provided by a coin in my possession (PLATE

[1] Margaret Thompson, *The Athenian Agora*, Vol. II, *Coins: Roman-Venetian* (Princeton, 1954), nos. 1863–1875, and the commentary, pp. 109–115.

[2] Thompson, pp. 110–114.

[3] Miss Thompson's designations are used here. Previous classifications of the anonymous issues are to be found in W. Wroth, *Catalogue of the Byzantine Coins in the BM*, Vol. II (London, 1908), pp. 480ff. and A. R. Bellinger, *The Anonymous Byzantine Bronze Coinage*, *NNM* 35 (New York, 1928), pp. 16ff. The issue in question is Wroth Class VI, Bellinger Class IV.

[4] Wroth attributed the issue to Isaac I (p. 513, see also p. 483 for his commentary); Bellinger (p. 17) argued for Theodora (A.D. 1055–1056), since he was reluctant to deprive her of a bronze coinage.

[5] P. D. Whitting and C. H. Piper, *Seaby's Coin and Medal Bulletin* (April 1951), p. 144.

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

XIX, 1). This Class E specimen shows traces of both the obverse and reverse legends of a previous striking along the edges of the flan. At 1–3 o'clock on the obverse appear the letters OVHΛ, while the reverse shows the head of a human figure at 3 o'clock and the partial legend +KωNT at 4–5 o'clock.

This combination of partial legends, together with the human head, identifies the undertype as the signed bronze of Constantine X (*BMC* 18–31); with a standing figure of Christ on the obverse and standing figures of Constantine X and Eudocia on the reverse. The complete legends are as follows:

Obv.: +ЄMMA NOVHΛ To l. and r. in field, $\overline{IC}$ and $\overline{XC}$.
Rev.: +KωNTΔK ЄVΔKAVГO (PLATE XIX, 2).
The die axis of the undertype is normal for this issue (↑ ↓).

On the basis of this overstrike evidence, it appears that Class E cannot be assigned to Isaac I or Theodora, but should be given to Constantine X as his first anonymous issue—Class F is his second. And, of course, there is also his second signed issue, showing Constantine alone (*BMC* 32–37). The chronological order of the signed and anonymous issues would, on the basis of the present overstrike evidence, appear to be as follows:

Constantine X	Emperor and empress. Struck mainly over Class D.
Constantine X	Emperor alone. Struck mainly over his first signed type.
Class E	Christ standing; three line inscription, $\frac{+}{\cup}$. Struck over Constantine X and empress type, and over Class D.
Class F	Christ seated; three line inscription, $\frac{+}{+}$. Struck mainly over Class E.

Although both signed issues have been placed before Class E, it is possible that Class E was struck concurrent with the second signed issue. There are as yet no reports of overstriking involving Class E and that issue but there is one example of the second signed issue

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

being overstruck by Class F.[6] Further evidence is required before the problem can be solved to complete satisfaction.

It appears that the succeeding emperors, Romanus IV (A.D. 1067–1071), Michael VII (A.D. 1071–1078), and Nicephorus III (A.D. 1078–1081), each struck two bronze issues, one signed and the other anonymous, Thompson's Classes G, H, and I, respectively. The signed issue of Romanus was very small with only 4 specimens among the Agora coins, none of which were listed as overstrikes. However, Miss Thompson noted 3 published reports of this issue being struck over Class G,[7] and there is one report of a Class G struck over a signed coin of Romanus IV.[8] The conclusion, then, is that these issues were struck concurrently. This is also true of Nicephorus III,[9] and there are two reports of Class H being struck over the named issue of Michael VII.[10]

Study of the pattern of overstriking generally bears out Miss Thompson's observation that each succeeding emperor attempted to remove the signed coins of his predecessor from circulation by using them as flans for his own anonymous issue.[11] Then, if the issue was large, any other coinage in circulation was used, including some of the same reign (although that may have been due to carelessness). Constantine X is the conspicuous exception, for his second anonymous issue was struck primarily on the first, and his second named issue, similarly, was struck mainly over the first signed issue. This probably reflects nothing more than the normal results of the order of striking outlined above, but one wonders if perhaps there was a particular event or set of circumstances in Constantine's reign which prompted a deliberate effort to wipe out the past and create a new image.

[6] Whitting and Piper, *Seaby's* 1951, p. 192.
[7] Thompson, p. 110.
[8] Whitting and Piper, *Seaby's* 1950, p. 530.
[9] Thompson, p. 111.
[10] Thompson, p. 111 and see Whitting and Piper, *Seaby*'s 1952, p. 379 under "Class 8."
[11] Thompson, p. 115.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

A HOARD OF "PORCUPINE" SCEATTAS

(PLATES XX–XXI)

D. M. METCALF

In the period between ca. 675 and ca. 750 the currency of Frisia and southern England consisted of "sceattas"—silver coins of a characteristic small, dumpy fabric, which replaced the earlier gold trientes and which were themselves eventually replaced by the larger and thinner denarii of Pepin and Offa. The "sceattas" are mostly anepigraphic, or inscribed only with a few half-understood letters. There are upwards of seventy different varieties in the series. Of these, the most plentiful is the "wolf-standard" or "porcupine" sceat. Its obverse, which has been variously interpreted, has an abstract design of a central curve, bristles, straight lines, crosses, and other



FIG. 1

symbols; its reverse is occupied by a square standard with a degraded copy of the inscription VOT/XX, or with a pattern or group of symbols to replace the letters. The obverse can be seen as a porcupine, but the name is purely a conventional one. The minor variations in the basic design are seemingly endless. A survey shows, however, that there are a half-dozen common versions, in each of which the details of the obverse and of the reverse and (significantly) of the reverse border are consistent and regular.[1] The Franeker hoard helps to demonstrate that the common versions were substantial issues. The general impression they give, taken overall, is that there were several mints or centers of production, each with its familiar and acceptable version of the "porcupine" design. Most of the coins were struck in Frisia, but some are English, as can be seen by comparing

[1] This summarizes the argument in D. M. Metcalf, "A Stylistic Analysis of the 'Porcupine' Sceattas," *NC* 1966, pp. 179–205, where references to numerous earlier studies will be found.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the relative proportions of the main variants among the Dutch and the English hoards and stray finds. The "plumed bird" version, for example, is English. It has its own characteristic reverse designs; and the system by which particular patterns of reverse were accepted as "belonging with" particular obverses spilled over to include other contemporary types of sceattas, both in England and on the continent. These relationships are expressed in concise form in figure 2.

The "porcupines" are not as tidy a series as figure 2 might suggest. Large numbers of specimens do not fit into any of the main categories. Some of them are straightforward forgeries, coins with silvering over a copper core, which have been found for example on the beach at Domburg. Others are of better quality, although the silver may be quite heavily alloyed with copper. They are generally based on the standard designs, but they usually borrow, and combine, elements deriving from more than one source. The Cimiez hoard contains some good examples of such "imitations." The date of deposit of Cimiez has generally been set at 737. It is important as a *terminus*: if an imitative "porcupine" in the hoard exhibits elements clearly borrowed from one of the substantive versions, that version must antedate the hoard. But there is little prospect of studying the imitations through their chronology. Among the "porcupines," as among other early types of sceattas, attractive designs seem to have been copied promptly and far afield.

The difficulty of studying the derivative coins (which this article is about) lies in the fact that there is no orderly system to be uncovered. One cannot hope to arrive at conclusions which will confirm and commend themselves as plausible. Almost by definition, the imitations are opportunist, or at least uninspired by respect for the conventional scheme. It is even harder to say just where they were struck than it is to date them closely. One cannot even be sure that much political control was exercised over the striking of sceattas in Frisia even when it was at its most orderly, although the large quantities and consistent style in which varieties E and F were produced (see Fig. 2) suggest regularity and some kind of planning, as do the very accurate weights of the best "porcupines."

A small proportion of coins which are in a coarse or stiff style are obviously the results of private enterprise; but many of the imitations

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

are, both in their general style and in the techniques of manufacture, perfectly presentable. It is thus quite likely that they should have been struck at the regular mints or centers, although in that case one would have to envisage a second phase in the issue of "porcupines," when confidence in the sceattas was already declining. Somewhere between these two categories, there is a group of rather undisciplined copies, which show a lack of insight into the governing ideas of the "porcupine" design. They are plentiful on the eastern fringe of the

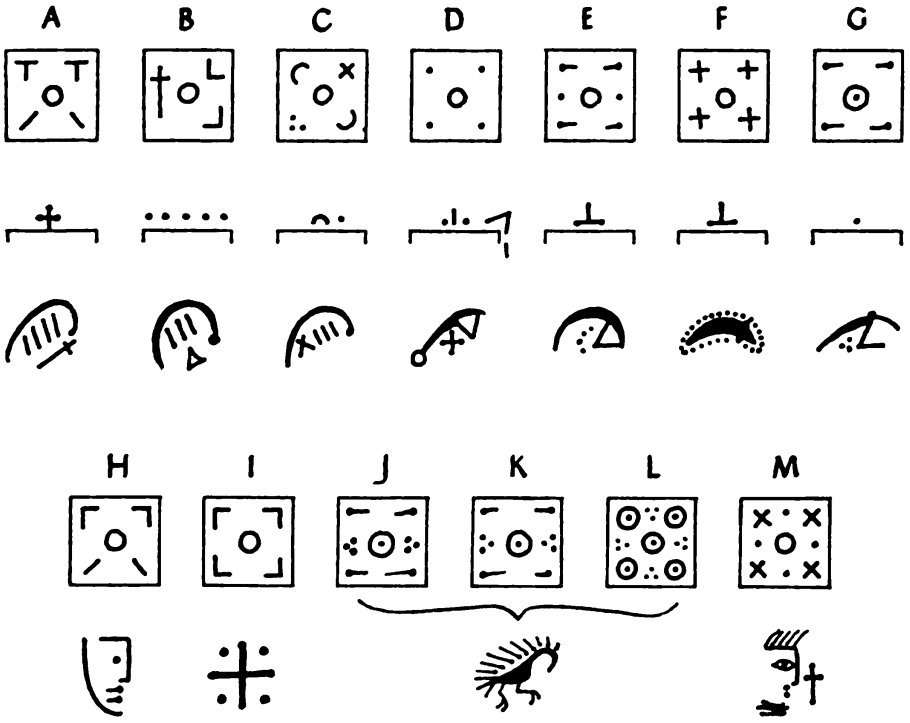


FIG. 2

circulation area: the German grave-finds of Galgenberg, Roisdorf, and Bonn might be cited as examples. The Cimiez hoard, again, illustrates several palpable imitations, mingled with Merovingian and English coins which had been carried to the south of France. The English finds are, on the whole, coins of good quality.

It is undoubtedly in Frisia that the more problematic "imitations" of the best quality were struck and used. The die links between the Groningen, Lutje Saaksum, and Kloster Barte hoards offer some

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

support for the theory that they are an east Frisian currency contemporary with regular varieties issued in the politically more settled area of western Frisia; the scarcity of "imitations" at Dorestad perhaps points to the same conclusion. But they are very plentiful also among the finds from Domburg, the emporium at the heart of the "porcupine" country. They are present, along with other types of sceattas, in the hoards from Hallum and Franeker. The former was concealed (to judge from its English element) early in the 730's, and Franeker may be even earlier. Thus, the derivative coins were already being struck by ca. 730, at a date when the debasement of the English sceatta series had barely begun. Some, of course, may have been issued appreciably later; this is a point which detailed research may be expected to clarify, by defining the scope and extent of the known varieties, by grouping the coins together as far as possible into little blocks from related dies, and then by seeing how far the blocks can be "tied in" to the specimens which are dated by a hoard-context. In an effort to classify the "imitations" in more detail, there are various lines of enquiry to be followed.

1) Analyses of the metal contents of the coins will show the relative fineness of the different varieties. Dirks describes all the "porcupines" from Franeker, but especially varieties E and F, as being of "very pure silver;" and he also quotes an analysis of another coin published by Rethaan Macare, which contained 53% silver. More recent analyses have shown that certain English varieties of "porcupine," including the "plumed bird" and "VOIC" varieties, contain upwards of 95% silver.[2] A forthcoming study,[3] based on a larger number of analyses, will show that the Frisian imitations (including several of those catalogued below) usually contain 70–85% silver, but sometimes less. It is not yet known whether this is appreciably lower than the alloy of the regular Frisian varieties, or even whether they themselves were of a closely controlled composition; but at least the figures offer an explanation for the scarcity of the "imitations" during the primary phase of sceattas in England.

[2] D. M. Metcalf, J. M. Merrick, and L. K. Hamblin, *Studies in the Composition of Early Medieval Coins* (*Minerva Numismatic Handbooks*, No. 3) (Newcastle-upon-Tyne, 1968), p. 22. [3] By Miss Hamblin and the writer.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Secondly, the minor constituents of the alloy, particularly the 1–1.5% gold the coins contain, and the residual amounts of lead and traces of zinc, may serve to indicate different sources of bullion, and varying technical standards of manufacture.

2) Metrology may contribute something, if the weights of enough well-preserved specimens can be put on record. Grierson has remarked how exactly two die-linked groups of sceattas, of which he was able to publish the weights, averaged 20 grains, no doubt their full theoretical weight. The 35 coins from the hoard published below, which are almost all in extremely fresh condition, average 18.8 grains. Only 4 of them exceed 20.5 grains. As well as differences in the mean average, different patterns of distribution around the mean may be of significance, revealing differences in mint practice in how carefully the weights of the flans were adjusted.

3) Die axis is another technical aspect of the manufacture of the coins, in which different patterns of die alignment may indicate that groups of coins are from different workshops or alternatively from separate phases in the production of the series. As a criterion, die alignment (like metrology) can be kept partly independent of considerations of style, and it can, therefore, serve to distinguish between the cutting of the dies and their actual use—a question which might arise, for example, if itinerant die cutters were producing dies for the use of local workmen. Lafaurie has demonstrated for the Merovingian series that the functions of the die cutters and the moneyers were dissociated.

There is reason to think that most, but not all, of the coins in our hoard were (like the better English sceattas) struck from dies adjusted in one of the four regular positions. The difficulty of being precise lies in deciding exactly which way the obverse design should be viewed, and whether it is as well centered on the flan as the reverse. The problem of recording accurate information here has been met by using arrows to indicate the four positions and by mounting the illustrations to correspond as closely as possible with the given indication. Where regularity prevailed in a sequence of dies, one may hope in this way to discover how the eighth-century workmen themselves saw the balance of the strange "porcupine" design.

4) An analysis of the style and detail of the coins should gradually consolidate a view of the whole series of dies from which the derivative

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

"porcupines" were struck. Near-duplicate traits will firmly associate coins by the same hand, and may thus link obverses or reverses on which there are formal differences of detail. The comparison of closely related coins will help to show what the die cutters thought of as the essential, and the inessential, elements of the design. Thus, nos. 18–19 below share an obverse die, which links two slightly different reverses; and no. 20, where the reverse is clearly by the same hand as those of nos. 18–19, serves to connect another obverse die which could not otherwise have been associated closely with the first. Similarly, the obverses of nos. 27–8 are doubtless by the same hand, and they link reverses with different designs. The obverses of nos. 29 and 30 link very different reverses.

All these are long-term lines of enquiry, calling for the evidence of large numbers of coins. "Porcupines" have always been the least esteemed variety of sceat, and they have not often been illustrated in sale catalogues, which favored the more sought-after and the more pictorial types. It is not possible, therefore, to build up a photo-file from numerous scattered sources, and there is still a need for the publication of as much new material as possible. The hoard which is offered here as a small contribution to that project was acquired, from a collector who was understood to have had it for a long time and to have hoped to make it the basis of some research, by M. Franceschi of Brussels. The coins figured in his 1966 list. Part of the hoard was bought by Mr. Carl Subak of Chicago, who very kindly lent it to the writer in the summer of 1968 for purposes of study and publication, in the desire that it should not be dispersed without a proper record; 24 of the coins that are catalogued were made available through his generosity.[4] The Ashmolean Museum had previously bought 5 coins from the hoard through an intermediary, and a further 6 specimens had been obtained directly from M. Franceschi by the writer. There may be other coins from the hoard, in the hands of collectors who obtained them from M. Franceschi, and if so, information would be very welcome, in the interests of securing as com-

[4] I would like to record my warm appreciation of the very friendly way in which Mr. Subak agreed to lend the coins.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

plete an account as possible of the hoard.[5] Nothing is known of its provenance. There were one or two sceattas in the collection that were manifestly not from the same source (as they had a corrosion patina), but the rest were very uniform in appearance, and, as has been mentioned, virtually fleur-de-coin. They might include one or two strays from other sources, but there is no positive reason to suspect contamination.

The hoard, then, so far as is known, consisted exclusively of "porcupines." In this, as in other ways, it is like the Groningen, Lutje Saaksum, and Kloster Barte finds, and the early Hanover hoard, of which the three published specimens are reproduced as Fig. 3.

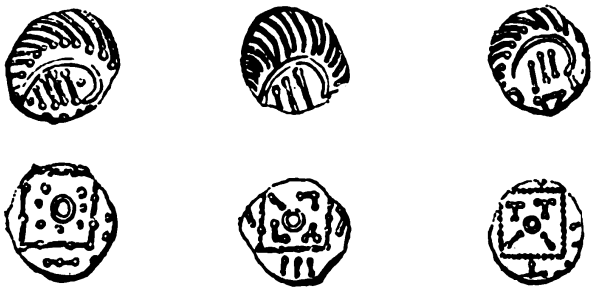


FIG. 3

One cannot exclude the possibility that it is a parcel from one of these hoards. The coins have been listed under the headings of the main varieties, but most of them are "derivative." They are very varied in style, no. 32 being particularly crude. Nos. 1–5 are probably regular coins of variety A, among which one can detect a consistent obverse style. No. 15 may be a regular coin of variety C. No. 13 is a "VOIC" coin in the best style—deriving its design from variety B, but with the status of a regular variety. Die similarities suggest that it is an English coin, and it is likely to be of very pure silver, if analyses of other "VOIC" specimens are a guide. If so, it may help to put a relatively early date on the hoard. The die-linked coins, nos. 18–19, together with no. 20, may be the best pointer to its origin.

[5] The writer would be pleased to hear from anyone who bought coins from the hoard. Letters may be addressed "Ashmolean Museum, Oxford."

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

CATALOGUE

Illustrations of comparative material are cited by the plate numbers, as follows:

Dirks — Plates A to G in *Revue de la num. belge* 1870.
Hill — Plate X in *Jaarboek voor Munt- en Penningkunde* 1955.
Lockett — Photographs of the collection, made available by the British Numismatic Society. Each lot is numbered a, b, c, etc. here in the order in which the coins appear page-wise on the photographs.
Man — Plates I–II in *Tijdschrift voor Munt- en Penningkunde* 1895.
NC — Plates XVI–XVII in *Numismatic Chronicle* 1966.
RN — Plates III–IV in *Revue Numismatique* 1938
SCBI — Various parts of the *Sylloge of Coins of the British Isles*, particularly Copenhagen I (1964) and Hunterian I (1961).
Stephanik — *Cabinet de monnaies Joh. W Stephanik* (sale-cat., F. Muller, Amsterdam, 12 Dec. 1904). Plate II.
Van der Chijs — Plates I–VI in P. O. van der Chijs, *De munten der frankische en duitsch nederlandsche vorsten*, 1866.

Variety A

1. *Obv.*: Beneath the curve there are 5 lines, of approximately equal length, and rectangular alignment. The right-hand line is partly joined to the curve. There is a bold dot (part of a cross?) beneath, and another symbol partly off the flan to the left. The inner tips of the "quills" extend beyond the terminal dots. The quills toward the tail are slightly thinner and closer together. Stephanik 63 is in the same general style; it has 6 lines beneath the curve. There were only 3 specimens in the Stephanik collection (nos. 60–62) which, like this coin, had as many as 5 lines. Lockett 218c is extremely similar in style, and is combined with a slightly different rev. design.
Rev.: The design of variety A, with a bold design added at 6 o'clock. Bold dots for serifs. The irregular slope of the first T is matched on Dirks, C, 7 (Hallum). Cross visible in lower border. 1.18 gr./18.2 grains. ↓

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

2. *Obv.*: Five lines beneath curve; similar general style to no. 1. At least 13 "quills." Two straight rows of very small dots have been added to the design, 3 dots vertically and 6 or 7 horizontally (cf. no. 4A below). There is a narrow "neck" between the curve and its terminal dot.
Rev.: Design of variety A, with a pyramid of 3 small dots added to the right, and 2 dots similarly to the left. The border is marked, apparently on 2 sides, VI (cf. the related coin with VOI in the border, *NC* 10).
1.40 gr./21.5 grains. ↗

3. *Obv.*: Four lines and an annulet beneath the curve. Some of the terminal dots on the lines are erratic, and others are spade-shaped (cf. the rev.). Traces of 18 "quills;" those toward the tail are very small and close together. Two dots and (part of) a large cross beneath. For the cross, cf. *SCBI* Hunterian 32 and 35, which are similar in general style. The shape of the curve and of the pattern of lines are comparable with those on nos. 1–2.
Rev.: Variety A; crosses on all 4 sides of the border. Characteristic bold, dotted style. The serifs of the letters T appear to be spade-shaped, although this may be merely the effect of punching the dots first and then cutting the line that joins them; cf., however, the extremely similar rev. of *RN* 42 (Cimiez)—note the near-duplicate seriffing of the second I, the lines running out from the corner of the square, and also the pronounced spade-shaped serifs and the annulet on the obv.
1.18 gr./18.3 grains. ↓

4. *Obv.*: The curve is less balanced in shape, but there are still, apparently, 4 lines beneath it, and traces of 15 or more "quills."
Rev.: Variety A, with crosses (probably) on all 4 sides; lines running outward from the corners of the square. An extra annulet appears in the border. The letters T, T, I, I are carefully pseudo-seriffed, with square ends to the strokes; but the cross in the border has dotted ends.
1.18 gr./18.3 grains. ↑. Collection of D. M. Metcalf.
Cf. another coin (illustrated as 4A) with reverse lettering inter-

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

mediate in style, and with an obverse that is close in style to nos. 1–4: note that there is a long cross on the obv., and a row of small dots. Collection of J. D. A. Thompson.
1.00 gr./15.5 grains. ←

5. *Obv.*: Three lines and 2 (or 3?) dots beneath the curve; 15 "quills." The lines are stepped downward to the left. Beneath, Λ + T. Generally very similar to *RN* 41 (Cimiez), of which the reverse, however, has dotted serifs on the letters T, T.
Rev.: Variety A, to which a pyramid of 4 dots has been added. Small, neat letters, with pseudo-serifs, as on no. 4. In the border the crosses, too, are square-cut. L-shaped elements are carried around the two lower corners.
1.25 gr./19.3 grains. ↑

6. *Obv.*: Curve with 4 lines beneath; 12 "quills." The symbols beneath are perhaps Λ Λ X X. Note that there is no dot at the tip of the curve; this suggests strongly that the coin is not a regular specimen of variety A. Two minute "ears" part way along the curve may be an echo from the design of variety F.
Rev.: Design of variety A, dotted style. In the border are crosses, with dots to (each?) side; and a line runs outward from the corner of the square. Very similar to no. 1.
1.15 gr./17.7 grains ↓
Cf. Dirks, C, 9 (Hallum).

7. *Obv.*: Curve without a dot at the tip. A fine dotted line runs most of the way round the curve, but not around the tip (cf. variety F). Four lines, of which the fourth is small and thin. An annulet beneath, and traces, perhaps, of another annulet to the left of the first. The "quills" are bolder and more widely spaced, but they are distributed around more of the circumference: there are traces of 13.
Rev.: Design of variety A, with dots added at 3, 6, and 9 o'clock. Dots (part of crosses?) in the border above and to the left; a line with a dot superimposed, to the right.
1.23 gr./19.0 grains. →

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Cf. Dirks, C, 2, 3, and 9 (Hallum), which do not, however, offer an exact parallel.

8. *Obv.*: Curve with a dot at the tip; a line of fine dots following the inner edge of the curve; 3 lines and a large dot beneath; in the field, an annulet and (?) Λ. Eleven "quills" with large dots.
Rev.: Design of variety A, but ⅂ replaces the second T. The letters are dotted, but the dots can barely be distinguished from the strokes. Cross in border to left; traces of crosses on the other 3 sides.
1.12 gr./17.3 grains ↖ Ashmolean Museum.

9. *Obv.*: There are apparently 4 lines, of which the right-hand one joins the curve. Some of the terminal dots are approximately square. There is a small dot between the curve and the right-hand line. Cf. *NC* 41.
Rev.: Design of variety A, with central dot in annulet. Large, boldly dotted crosses in border; (?) curve around upper left corner.
1.24 gr./ 19.1 grains ↑ Ashmolean Museum.

10. *Obv.*: Curve with 2 dots, one at the tip and the other part way along. Three lines, and 2 dots (unjoined, but intended for a fourth line?); 3 small dots above. Traces of 16 "quills," which are curved, but which do not slope back to the left as on most specimens.
Rev.: T//⅃ around annulet. The border, on at least two sides, is empty.
1.23 gr./19.0 grains →

11. *Obv.*: Thin curve; widely-spaced "quills" and lines. Dotted line (part of cross?) beneath.
Rev.: T ⅂/—\ around central annulet, with dot added below. Border with crosses.
1.11 gr./17.2 grains. ↓

12. *Obv.*: Small curve, leaving room for longer "quills." Three lines; OΛ· and part of (?) cross beneath. The tips of some of the quills extend beyond the dots.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: Small square; ⌜⌝/‹‹ around annulet, with dot added below. Border with zig-zag line and dots above, ⊥ to left, and ⌜ at upper left corner.
1.10 gr./16.9 grains ↑ Ashmolean Museum.

"VOIC" VARIETY (*Elements derived from variety B*)

13. *Obv.*: The two lines to the left within the curve are joined together taking the form of an "H"; the line to the right is joined to the final dot of the curve; beneath, there are two triangles. These three details are characteristic of the "VOIC" variety: *NC* 6 is a near-duplicate die. Note that the final "quill" to the right is joined by a line at right angles, which is perhaps part of a cross.
Rev.: Bold style: all the elements in the design correspond with those of *NC* 5. In the border, part of a (?) triangle (cf. *NC* 1) flanked by 2 dots. This again may be an element of the design derived from variety B. Two dots are visible in the lower border, cf. the joined row of 3 dots on other "VOIC" coins. Extremely similar to Van der Chijs 17.
1.33 gr./20.5 grains →

14. *Obv.*: Details which are unexpected on a "VOIC" coin are (i) the bold annulet in the lower field, where there should be a triangle; (ii) the dot on the tail-end of the curve; (iii) the 11 or 12 minute dots which partly outline the curve.
Rev.: The "VOIC" design, including the two bold dots in the field, but with ⌞ for ⊏, and ⊣ for ⌜. The ⊣ lacks terminal dots (serifs). In the border, a cross to the right, and L-shaped pieces around each right-hand corner. Perhaps a row of 3 joined dots above.
1.31 gr./20.2 grains. ← Ashmolean Museum.

VARIETY C

15. *Obv.*: Beneath the curve there are 3 lines, and a fourth small symbol which may be a line or a blundered X; the curve is joined to the right-hand line; annulet beneath.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: There are traces of a cross in one side of the border. If this side is placed at the top, the symbols in the square are ⊢⅂/X•• around an annulet. Under the 2 dots are 5 faint dots forming an L; the die cutter perhaps changed his mind after roughing out the pattern. In the left border, .⌒.. In the lower border, a zig-zag line(?).
1.00 gr./15.4 grains ↓

16. *Obv.*: Curve with dot part way along. Beneath, XIII; two large dots and an annulet. The curve and "quills" are of rough workmanship.
Rev.: Small square with Γ•/•• around an annulet. Unusually elaborate border: 5 or 6 "quills" to left; ⊣ :T/ below.
1.17 gr./18.1 grains. ← D. M. Metcalf.
Cf. Dirks A, 5 (Franeker). The reverses of *SCBI* Hunterian 44 and Man 25 are comparable, but their obverses are very different. Van der Chijs 10 also has "quills" in the rev. border.

17. *Obv.*: Widely spaced design. Curve with dot at end; 3 lines; Λ beneath.
Rev.: The beading of the square consists of dots spaced out along the lines; Γ⊃/⊂X around annulet, with a dot above and below. Zig-zag border above; opposed curves ∪⌒ to right. Cf. Lockett 217f.
1.10 gr./17.0 grains. → Ashmolean Museum.

Variety E

18. *Obv.*: Two small dots on the curve close to either side of the point where the triangle joins it. The other two angles of the triangle are marked by small dots. Beneath, XΛ; 2 very small dots in the field.
Rev.: Small square, erratically dotted; Γ⊃/−− around annulet. VII∪ around lower left corner of border.
1.31 gr./20.1 grains. ← D. M. Metcalf.
SCBI Hunterian 41 is perhaps related.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

19. *Obv.*: From the same die as no. 18.
Rev.: Square of similar shape and size to that of no. 18, dotted in the same style; ⌜|/— — around annulet. Border with rectangular shape above (borrowed from the obverse of variety E), line below, and V⌣|.
1.25 gr./19.3 grains. ←

20. *Obv.*: Cross to left of triangle, as on Dirks B, 24 (Franeker). The symbols beneath are obscure, perhaps O∧O.
Rev.: By the same hand as nos. 18–19. Border empty above and to right; zig-zag line below.
1.28 gr./19.7 grains. →
Cf. Hill 14 (Lutje Saaksum).

21. *Obv.*: Deeply-cut curve, more in the style of variety E; O+ to left; an extra row of small dots between the curve and the "quills."
Rev.: Bold square with ⌜\/—| around annulet. Border with V|⌣ to left, ⌜ around upper left corner, .|. above, and L— below.
1.25 gr./19.2 grains ↖

22. *Obv.*: Curve with inconspicuous terminal dot and a very slight line across the curve, part way along, equivalent to the dot of variety F. The triangle has degenerated into an L (cf. variety G, but the curve here is clearly derived from E), and there is a similar, very slight line superimposed on it near where it joins the curve; a large dot inside the "triangle" and a smaller one to the left; OX close together; ·O below.
Rev.: Bold square with ⌜ /|X⌟ around annulet. Border pattern ∧V on two sides, with | or + at corner? Cf. the style of the rev. of no. 21.
1.29 gr./19.9 grains. ↙

23. *Obv.*: Small curve, and triangle of the same thickness of line; annulet to left; numerous large dots and symbols beneath.
Rev.: Linear square with only a few dots superimposed on the lines (one at each corner and 2 more on each side?), very similar to *NC* 41. If the cross (·+·) on one side of the border is placed as

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the top of the design, there is an annulet at the upper left corner, and a zig-zag line to the left. The central pattern is rotating rather than symmetrical: this again seems to match *NC* 41: I—/LI around annulet.
1.21 gr./18.6 grains. ←

24. *Obv.*: Crowded, bold design. Tip of curve extends beyond triangle and is prominently dotted. There is apparently a large dot joined to the tail-end of the curve as well. Boldly-dotted cross, with 2 extra dots almost touching it. Beneath, the symbols ΛOΛO, with a large dot below the second Λ.
Rev.: Neat style, more lightly cut than the obv. Design of variety A, with pyramid of 3 dots added below; crosses in the border to the right and below, and also at the lower right corner.
1.30 gr./20.1 grains. →
Cf. *SCBI* Hunterian 45 and Hill 3 (Groningen), which are however much more like each other than they are like this coin.

25. *Obv.*: Crude work: the "quills" are not dotted, and the triangle is not joined to the curve. Two or 3 lines to the left of the triangle(!)
Rev.: Neat style, variety A. Large square, well centered, with traces of (?) curves on each side.
0.99 gr./15.3 grains. →

Variety F

26. *Obv.*: Fat curve, with small dot superimposed; complete outline of small dots. Reversed "quills." Dot, 3 lines, and ringed dot below.
Rev.: Cruciform pattern; the central dot is ringed with minute dots. Border with (?) cross above, 3 (?) quills to the right, (?) an annulet to the left, and a zig-zag line below.
1.28 gr./19.7 grains. → D. M. Metcalf.
From the same dies as Lockett 219c. Extremely similar to *SCBI* Copenhagen 35 (where the quills are not reversed).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

27. *Obv.*: A bold dot on the curve, which reproduces the "beaked" style of variety F closely. The border of fine dots runs round the beak but is lacking inside the curve. X•:III; annulet beneath.
Rev.: Probably •+• above and below, with —:/:.X around annulet (cf. *SCBI* Copenhagen 32). Zig-zag line to left. The die has given a soft or blurred impression, like that of no. 28, and in contrast with no. 29, where the reverse is sharp.
1.22 gr./18.8 grains. ↖
Very similar to *SCBI* Copenhagen 32. Cf. also *NC* 1966, p. 194, Fig. 3c (Thanet), and Hill 7 (Groningen).

28. *Obv.*: Similar to no. 27: again, the border of fine dots is lacking on the inner side of the curve. Otherwise, extremely similar to *SCBI* Copenhagen 32 and doubtless by the same hand. Three lines inside curve; T+ beneath.
Rev.: Border in high relief, with dots superimposed (presumably one at each corner, and then 4 more on each side). Inner square of fine dots; 4 dots around annulet. Cf. *NC* 34–6.
1.36 gr./20.9 grains. ↑ D. M. Metcalf.

29. *Obv.*: The curve is thinner, but still in the style of variety F. It is outlined with large, widely-spaced dots. Very bold "quills." Within the curve, XIII; beneath, .O\.
Rev.: The same design as no. 28, but more sharply struck. Outer square with (presumably) one dot at each corner, 5 more on two sides, and 6 more on the other two. Note that *NC* 37, which appears to be similar, has many more dots to mark the outer square.
1.32 gr./20.3 grains. ↓
From the same rev. die as Carlyon-Britton, lot 159, and from an extremely similar obverse die. Extremely similar also to *SCBI* Copenhagen 29 and certainly by the same hand.

30. *Obv.*: Very similar to no. 29, and even closer to *SCBI* Copenhagen 29 (note the X of XIII), almost certainly by the same hand. The link is further demonstrated by *BMC* 70 (pl. II, 7).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: Small square; around the central annulet are two I's with a dot at each end, and two I's with a dot half way along. The border is apparently compartmented by dotted lines (or crosses?) running outward from the corners of the square. Cross above; ⊓ and 2 dots to the left; (?) ⊣. below.
Cf. the rev. of *BMC* 70.
1.40 gr./21.6 grains. ↑
Cf. Hill 17 and 19 (Lutje Saaksum), which have a much neater reverse design.

31. *Obv.*: Curve with dot superimposed (as variety F), but with large annulet joined to tip. The outline is of bold dots, joined by a fine line. Three lines, flanked by dots; beneath, 4 or 5 dots. Widely-spaced "quills."
Rev.: Perhaps in the same style as no. 24. Small square; ↄ⅂/XC around annulet, with 5 dots added. Large symbols in border: bold dotted cross, flanked by dots, above; angle around upper left corner; (?) triangle to left.
1.15 gr./17.7 grains. →

Variety G or D

32. *Obv.*: The heavily-modelled curve is apparently derived from variety G, although the large cross beneath is perhaps copied from variety D.
Rev.: Design of variety D (cf. *NC* 26–29). Rough square of coarse dots. Flattened zig-zag with dots, as the border pattern.
1.25 gr./19.3 grains. ↗

33. *Obv.*: Curve, etc., perhaps derived from variety G. Cross and annulet beneath.
Rev.: Small square, with dots spaced irregularly along the sides. IT/IΓ around annulet. Large dotted cross beneath (and above?); two annulets roughly applied in the right-hand border.
1.22 gr./18.8 grains. ↓

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

34. *Obv.*: Five lines, the right-hand one joined to the curve. Six long, swept-back "quills," and perhaps a seventh very long one, with its dot at 5 o'clock. Symbols beneath, perhaps VΛ.
Rev.: Symmetrical pattern, VΛV/I I/ΛTΛ around annulet. Border with ⊔ to left and right, and zig-zag line beneath. Extremely similar to Dirks F, 19 (Domburg), the obverse of which also has long, swept-back "quills."
1.25 gr./19.2 grains. ↖

35. *Obv.*: Crude curve, with 3 lines beneath.
Rev.: Rotating cruciform pattern with central annulet. Border with zig-zag pattern.
1.09 gr./16.8 grains. ↗ D. M. Metcalf.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A MU'TAZILITE COIN OF MAḤMŪD OF GHAZNA

(PLATE XXII)

RICHARD W. BULLIET

The American Numismatic Society possesses an extraordinary coin of Maḥmūd of Ghazna, struck at Nishapur in the year 387 A.H./A.D. 997. The obverse of this coin contains a verse from the Qur'ān, III, 17, and the apparently unique use of this verse on a coin prompts a discussion of the significance of the verse and the circumstances surrounding its choice as a coin legend.

Theoretically, Nishapur was at that time subject to three different authorities. First, it was subject to the 'Abbasid Caliph in Baghdad, although in fact the real power of the caliph scarcely extended beyond the limits of the city of Baghdad itself. The caliph in the year 387/997 was al-Qādir bi'llāh, whose reign had begun in 381/991 after the deposition of his predecessor aṭ-Ṭā'ī li'llāh. Aṭ-Ṭā'ī's deposition and al-Qādir's accession had never been recognized by the Sāmānid dynasty in Khurāsān, however; and al-Qādir's name did not appear on the coinage of that province until 389/999 when Maḥmūd of Ghazna defeated his Sāmānid suzerain and became an independent ruler.

Below the caliph, the next overlord of Nishapur was the head of the Sāmānid dynasty, who had his capital at Bukhārā in Transoxania. The Sāmānid ruler Nūḥ b. Manṣūr died in this year, 387/997, in the month of Rajab, the seventh month of the Islamic year. He was succeeded by his son Manṣūr b. Nūḥ. In the province of Transoxania, Manṣūr b. Nūḥ was not immediately recognized as his father's successor because of court intrigue; not until Dhū al-Qa'da, the eleventh month of the Islamic year, was the *khuṭba* read in his name in that province.[1]

At the most immediate level the city of Nishapur was ruled by a governor appointed by the Sāmānid ruler. This governor was actually the commander of the Sāmānid army in Khurāsān who made

[1] 'Abd al-Karīm b. Muḥammad as-Sam'ānī, *The Kitāb al-Ansāb*, ed., D. S. Margoliouth; E. J. W. Gibb Memorial Series, XX (London, 1912) f286b.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Nishapur his seat of government because it was the largest and most important city in the province. For some years prior to 384/994, the governor had been of the Sīmjūrid family, a family of Turkish origin which had established itself as the leading family of Quhistān, the province immediately south of the area of Khurāsān in which Nishapur is located. Their control of the city had come to an end when a revolt by Abū-'Alī as-Sīmjūrī and an important Turkish general named Fā'iq against the Sāmānid Nūḥ b. Manṣūr had been suppressed by Sabuktakīn, another Turkish general in the service of Nūḥ b. Manṣūr. Sabuktakīn was rewarded for his service by the honorific title Nāṣir ad-Dawla wa'd-Dīn, while his son Maḥmūd, who had helped him suppress the revolt, was given the title Sayf ad-Dawla and named to replace Abū-'Alī as-Sīmjūrī as governor of Nishapur. This was the beginning of the career of Maḥmūd of Ghazna, the famous conqueror of India. Maḥmūd lost the city for a short time to Abū-'Alī in 385/995; but in 387/997, when the coin was struck, Maḥmūd was governor of Nishapur and Abū-'Alī was dying in Sabuktakīn's prison. The Sīmjūrid family remained a power in Quhistān, however, in the person of Abū-'Alī's brother Abū-al-Qāsim.

The year 387/997 saw another death as well; that of Sabuktakīn, which took place in Sha'bān, the eighth month of the Islamic year, in a village in eastern Afghanistan.[2] A problem arose concerning who was to succeed Sabuktakīn as head of the family and virtually independent ruler of the Sāmānid domain south of Transoxania. Maḥmūd was the eldest son; but Sabuktakīn had conferred the governorship of Ghazna, his capital, upon another son, Ismā'īl. An exchange of envoys after their father's death rapidly made it apparent to both sons that their dispute could be resolved only by battle. Thus, Maḥmūd and his army set off eastward to do battle with Ismā'īl, leaving Nishapur virtually undefended. In all likelihood, by the end of Ramaḍān, the ninth month, Nishapur was open to occupation by anyone sufficiently powerful to defend it. This is not say, however, that Maḥmūd was not intending to return to this, his richest and most important city.

[2] Muhammad Nazim, *The Life and Times of Sulṭān Maḥmūd of Ghazna* (Cambridge, 1931), p. 32.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The person who occupied the city after Maḥmūd's departure was the Turkish chamberlain of the Sāmānid court, Bektūzūn. He was appointed governor by the new Sāmānid ruler, Manṣūr b. Nūḥ, as part of the resolution of the court intrigue that had been delaying Manṣūr's recognition in Transoxania.[3] Bektūzūn probably took physical possession of the city in the eleventh month of the year, that being the month in which Manṣūr's rule was finally acknowledged. Since this took place at least a month after Maḥmūd's evacuation of the city, it must be assumed that at the time of his departure Maḥmūd was still the official Sāmānid governor of Nishapur and had no particular reason to suspect that he was soon to be deprived of that post.

The coinage of the Nishapur mint for the year 387/997 must now be fitted onto this chronological framework. There are four issues extant for this year. The collection of the American Numismatic Society contains numerous silver dirhems from this year bearing the names of the Caliph aṭ-Ṭā'ī li'llāh, the Sāmānid Nūḥ b. Manṣūr, and Maḥmūd with his title Sayf ad-Dawla and the small figure of a sword. These dirhems are from a hoard containing coins of the years 386/996 and 387/997.

Also in the collection of the ANS are two gold dinars identical to the dirhems but with the name of Manṣūr b. Nūḥ instead of Nūḥ b. Manṣūr.

Third, there are four gold dinars in various collections[4] bearing the name of the Caliph aṭ-Ṭā'ī li'llāh, the Sāmānid Manṣūr b. Nūḥ, and the Turkish chamberlain Abū-al-Fawāris Bektūzūn.

The fourth issue, with which this paper is specifically concerned, is represented by the unique specimen in the collection of the ANS (PLATE XXII, A). It is a silver dirhem with the following inscriptions:

Obv.:

شهد

الله انه لا اله الا

هو والملا ئكة

[3] Ibid., p. 42, note.

[4] Leningrad, Markow, p. 168, no. 1252 (misread as 389); Lane-Poole, *Khedivial Library*, p. 332; ibid, p. 332, note, Copenhagen and collection of M. de l'Ecluse (misread as 389).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

و اولوا العلم قائماً
بالقسط لا اله الا
هو العزيز الحكيم

Allāh (Himself) is witness that there is no God save Him. And the angels and the men of learning (too are witness). Maintaining His creation in justice, there is no God save Him, the Almighty, the Wise. (Qur'ān III, 17; Pickthal's translation)

Rev.:

لله
محمد رسول الله
الطائع لله منصور
ابن نوح الولى سيف
الدولة محمود بن
ناصر الدين والدولة

For God / Muḥammad is the messenger of God / aṭ-Ṭā'ī li'llāh Manṣūr / ibn Nūḥ al-Walī [Governor] Sayf / ad-Dawla Maḥmūd ibn / Nāṣir ad-Dīn wa'd-Dawla.

The marginal inscriptions including the name of the mint and the date are perfectly conventional, as is the inscription in the reverse area with the name of the caliph, the name of the Sāmānid ruler, and the name of Maḥmūd as governor with his title, Sayf ad-Dawla, and that of his father, Nāṣir ad-Dīn wa'd-Dawla. The inscription in the obverse area, however, is unique and stands in the place of the almost invariable legend, "There is no God but God alone; He has no partner."

It is not simply this unusual inscription that sets the coin apart; its fabric is noteworthy as well. It has a diameter of 31.8 mm. compared with 19 mm. for other dirhems struck in Nishapur in the same year and a weight of 4.414 grams compared with 3.012 grams. Furthermore, its silver is clearly more debased than that of the other

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

dirhems. The coin apparently belongs to the same hoard as the other dirhems of this year in the ANS collection, and it shares with the other hoard dirhems a peculiar, cracked surface. It should be noted that in size our coin is reminiscent of dirhems struck a decade earlier in Nishapur and also of dirhems struck at Sāmānid mints in Transoxania. It is significantly heavier than these other coins, however, and betrays no evidence of being an overstrike.

It is possible to construct a rather tight chronology for the four issues struck in 387/997. The dirhems with the names Maḥmūd and Nūḥ b. Manṣūr must have been struck prior to or, allowing time for the news to travel, shortly after the death of the latter in the seventh month. The dinars with the names Maḥmūd and Manṣūr b. Nūḥ must have been struck between the seventh month, when Manṣūr's father died, and Maḥmūd's loss of control of the mint, which may have occurred as early as his evacuation of the city or as late as Bektūzūn's occupation, that is to say, between the ninth month and the eleventh month. The fact that these dinars in Manṣūr's name were struck at all proves that the report of a delay in the recognition of Manṣūr until the eleventh month does not apply to Khurāsān since Maḥmūd was not in control of the mint in the eleventh month. The third issue, the dinars in the name of Bektūzūn, must date from his occupation of the city in, presumably, the tenth or eleventh month.

The fourth issue, assuming that it was a regular issue of the Nishapur mint, must have been struck, like the dinars of the second issue, between Nūḥ's death in the seventh month and Maḥmūd's loss of control over the mint. In view of its singular fabric, however, the possibility of its being struck in a different mint must be admitted. In this case, it could have been struck after Bektūzūn's occupation of the city.

But the real interest of the coin lies in its inscription. Since the beginning of the ʿAbbāsid period the obverse legend on gold and silver coinage had been almost invariable. The distinctive shape of this inscription—in particular, the first line of it—was readily recognized even by the illiterate majority of the population. This is evident from the fact that illiterate counterfeiters and imitators of Islamic coins always strove to reproduce the shape, though not

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

necessarily the actual words, of this inscription.[5] Hence, a substantial change in the text and consequently in the shape of this inscription was a serious matter. There might even have been a risk of demonetization involved. Thus, it may be assumed that this change in legend was ordered by Maḥmūd for a specific reason. Moreover, considering his situation, with internecine war imminent on the one hand and an unresolved interregnal struggle present on the other, it must be assumed that whatever occasioned the change in legend was of exceptional importance and immediacy. Otherwise, Maḥmūd would have put it off until a more relaxed time.

The most obvious reason for his changing the coin inscriptions would be if he were revolting against his suzerain. The unusual inscriptions used before this by Abū Muslim,[6] the 'Abbāsid revolutionary, and after by the Zīrids in North Africa between 441/1050 and 449/1059[7] were at least partly motivated by such a reason. But there is no indication whatsoever that this was Maḥmūd's purpose. The coin bears the names of the Sāmānid suzerain and of the caliph recognized by that suzerain and does not honor either Maḥmūd or his father with any title which was not bestowed on them by that suzerain's father. When Maḥmūd did finally declare himself independent in 389/999 he immediately altered his coinage in all these respects, dropping the name of the Sāmānid, recognizing the Caliph al-Qādir, and taking on a new title granted to him by al-Qādir.

Actually the key to understanding the significance of the inscription lies in the political and religious organization of the city of Nishapur at the time.[8] In theory, of course, Maḥmūd ruled the city as governor and appointed all governmental officials. But in practice this was not exactly the case. Instead there were two governmental organizations. One of them was directly under Maḥmūd's control and had authority

[5] E.g., David M. Lang, *Studies in the Numismatic History of Georgia in Transcaucasia* (New York, 1955), p. 19, pl. I, 11, 12.
[6] George C. Miles, "Some Islamic Coins in the Berne Historical Museum," *Schweizerische Numismatische Rundschau*, XLV (1966), 133.
[7] Aimée Launois, "Influence des docteurs malékites sur le monnayage Zīride de type sunnite et sur celui des Almoravides," *Arabica*, II (1964), 127–150.
[8] The following discussion is taken from Richard W. Bulliet, "The Social History of Nishapur in the Eleventh Century," unpubl. diss. (Harvard, 1967), chs. III, V.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

primarily in the fields of taxation and the army. The other was dominated by the "religious class," a group of wealthy, intermarried families attached to one or the other of the two major religious factions in the city. This organization controlled education, religion, and law; even more important, it was the focus of urban loyalty and popular sentiment. No secular ruler such as Maḥmūd could hope to rule Nishapur or any other major city for very long without the support of at least part of the "religious class."

The "religious class" of Nishapur was divided, basically, into two major factions, the Ḥanafī-Mu'tazilī and the Shāfi'ī-Ash'arī. These two major factions had both a legal and a theological component. One of them followed the legal code of the Ḥanafī law school, the other the legal code of the Shāfi'ī law school. One of them adhered to the tenets of the ultrarationalist Mu'tazilī theological doctrine, the other to the tenets of the moderate Ash'arī doctrine. Beyond this, however, the factions had general political outlooks not unlike those of full-fledged political parties. The Ḥanafī-Mu'tazilī faction was comparatively conservative, aristocratic, and opposed to change while the Shāfi'ī-Ash'arī faction was more open to change and responsive to popular tendencies.

A third major faction in the city was the Karrāmiya. But the membership of the faction was largely of lower-class origin, and as a result it did not function politically as did the other two. Having no apparent hope of coming to power as a governmental faction, the Karrāmiya pursued a revolutionary, populist course of action.

Maḥmūd's own position in these religious-political matters is debatable. It has been argued that both he and his father were partisans of the Karrāmiya.[9] Around the year 400/1010 he made the shocking appointment of the head of the Karrāmiya to the office of *ra'īs* of Nishapur, the paramount civil office within the bureaucracy controlled by the "religious class." This had disastrous results. On the other hand, there are definite indications that he sympathized with the Ḥanafī-Mu'tazilī faction, favoring them in his official appointments. Most probably Maḥmūd endeavored to support both of these factions simultaneously in order to gain the broadest possible

[9] C. E. Bosworth, *The Ghaznavids: Their Empire in Afghanistan and Eastern Iran* (Edinburgh, 1963), pp. 186–187.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

support for his rule. This seems to be the proper interpretation of the verse written by his secretary Abū-al-Fatḥ al-Bustī:

> The only true legal system is Abū-Ḥanīfa's, just as
> the only true religious system is Muḥammad b. Karrām's

This verse conveniently ignores the fact that the Ḥanafīs and Karrāmīs were bitterly opposed to each other. In the long run, this policy of Maḥmūd's was a failure; but at the beginning of his reign in 387/997 this fact was yet to be realized.

To come back to the coin inscription itself, the verse begins and ends with affirmations of the unity of God. On this point all Islamic factions were in agreement, and it was also the import of the customary obverse legend on coins. The most significant phrase in the verse comes in the middle, "Maintaining His creation in justice." The word for justice here is *qisṭ*, a synonym for the more common word *'adl*. As opposed to injustice, of course, all factions were surely in favor of justice; but as a theological term denoting the justice of God, the word has a distinct Mu'tazilī connotation.

Belief in God's justice was one of the five fundamental dogmas of Mu'tazilī theology.[10] Of the other four, one was affirmation of the unity of God, on which all factions agreed (although each attacked the other's definition of unity) and which, in any case, is doubly contained in the verse in question; the remaining three "played hardly any part in the theological discussions."[11] Moreover, the Mu'tazilī faction in Nishapur at that time was commonly referred to as the *madhhab al-'adl*, the "justice sect."

To argue from the other direction, it is quite probable that anyone desiring to evoke the Mu'tazilī doctrine of justice on a coin would have chosen precisely this verse from the Qur'ān. There are twenty-seven occurrences of the words *qisṭ* and *'adl* in the Qur'ān, but only five of them refer specifically to the justice of God. Of these five, two use *'adl*, a word equivocal in coin legends since, in the numismatic context, *'adl* has the particular meaning of "just weight." In fact, Maḥmūd's own coins carry this word above the obverse area during

[10] K. V. Zettersteen, *Mu'tazila*, *EI*[1], s.v.
[11] W. Montgomery Watt, *Free Will and Predestination in Early Islam* (London, 1948), p. 63.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

all but a few of the thirty-five years in which he issued coins. Thus, a verse with *'adl* as the operative word might have been mistakenly interpreted numismatically rather than theologically. Finally, of the three verses with *qisṭ*, only the one chosen contains, in addition, the affirmation of the unity of God and admits of being engraved so that its first line at least resembles the first line of the customary inscription.

It is also worthy of mention that this very verse is quoted in a theological work of the most famous Mu'tazilī of the time, Qāḍī al-Quḍāt 'Abd al-Jabbār,[12] demonstrating that the verse was in current use among Mu'tazilīs at that time. Moreover, the famous Mu'tazilī Qur'ān commentator Abū-al-Qāsim az-Zamakhsharī (467–528/1075–1144) writing at a somewhat later date cites this verse as an allusion to and, indeed, an open declaration of the Mu'tazilī doctrine.[13]

The inscription, then, was intended as an expression of official support of the Ḥanafī-Mu'tazilī faction in Nishapur. That Maḥmūd chose precisely these turbulent few months of the year 387/997 to make this expression indicates the presence of some sort of challenge on the local political level that made it necessary for him to strengthen immediately his tie with this faction. As demonstrated previously, the chronology of events makes it virtually certain that Maḥmūd knew nothing of Bektūzūn's impending appointment to the governorship at the time of his departure from the city, and, in fact, Maḥmūd probably had in mind a threat much closer at hand, namely Abū-al-Qāsim as-Sīmjūrī just to the south of him in Quhistān. As recently as 385/995 the Sīmjūrids had been able to drive Maḥmūd out of Nishapur temporarily, and they certainly retained still the notion that the governorship of that city was rightfully theirs. Furthermore, the rivalry between the Sīmjūrids and the family of Sabuktakīn, which had begun in 384/994, had been kept aflame by Sabuktakīns' imprisonment of Abū-al-Qāsim's brother, Abū-'Alī. To Maḥmūd, on the eve of his departure to fight his brother, the reoccupation of Nishapur by the Sīmjūrids must have seemed inevitable. In fact,

[12] Qāḍī al-Quḍāt Abū-al-Ḥassān 'Abd al-Jabbār, *Kitāb al-Majmū' fi'l-Muḥīṭ bi'l-Taklīf*, ed. J. J. Houben (Beyrouth, [1961]), p. 25.
[13] Abū-al-Qāsim Muḥammad az-Zamakhsharī, *al-Kashshāf* (Cairo, 1935), Vol. I, p. 180.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Bektūzūn had occupied the city for only three months when he was challenged militarily by Abū-al-Qāsim early in 388/998.[14]

Fortunately, sufficient information has been preserved to enable us to determine the position of the Sīmjūrids in the factional politics of the time. When Abū-al-Ḥasan as-Sīmjūrī, the father of Abū-'Alī and Abū-al-Qāsim, had been governor of the city, he had been a strong and active patron of the Shāfi'ī-Ash'arī faction. When the famous Ash'arī theologian Ibn Fūrak was made unwelcome in the city of Rayy, Abū-al-Ḥasan, at the bidding of the leaders of this faction, invited him to settle in Nishapur and built for him a house and a *madrasa*.[15] This same theologian later lost his life as a victim of a Karrāmī witchhunt sanctioned by Maḥmūd.[16] Furthermore, the biography of Abū-'Alī written by the Ash'arī biographer and traditionist al-Ḥākim an-Naysābūrī and preserved by as-Sam'ānī, another Ash'arī biographer, is so lavishly laudatory as the leave no doubt that the Sīmjūrids were particularly acceptable in the eyes of the Shāfi'ī-Ash'arī faction.[17]

The political import of Maḥmūd's dirhem is thus quite clear. Maḥmūd expected to leave the city, settle his argument with his brother, and return. He also expected to return to a city under Sīmjūrid control. Appreciating the importance of maintaining the allegiance of at least one of the local factions, he issued this coin as an expression of official support for the less pro-Sīmjūrid of the two. The coin is a true propaganda piece intended to be read by and understood by the educated "religious class." It was an effort to pave the way for a smooth return to power and to keep alive the memory of his patronage among the Ḥanafī-Mu'tazilī faction.

Still there is the problem of the unusual fabric of the coin. Clearly, if the coin was produced by a different mint and bears the word Naysābūr (Nishapur) erroneously, the above argument would be jeopardized. But this seems not to have been the case. While it is true that the size of the coin is reminiscent of certain other mints,

[14] W. Barthold, *Turkestan down to the Mongol Invasion*, E. J. W. Gibb Memorial Series, new series V (London, 1928), p. 265.
[15] Subkī, *Ṭabaqāt ash-Shāfi'īya al-kubrā* (Cairo, 1905–1906), Vol. III, p. 52.
[16] Idem.
[17] as-Sam'ānī, *The Kitāb al-Ansāb*, f323a–b.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

none of these other mints were under the control of Maḥmūd in the year 387/997. The only possible candidate is Balkh, but it was certainly under the control of his brother Ismā'īl. Moreover, the epigraphy of the coin is definitely in the style of the Nishapur mint.

The solution to this problem is probably simply that a larger flan was necessary to accommodate the greater length of the new inscription. It has about twice as many characters in it as the customary inscription it replaces. It is noteworthy that the inscription area of the large diameter dirhems from the Transoxanian mints is no larger than the area of the small dirhems that Maḥmūd issued earlier in 387/997. The dirhem under discussion, on the other hand, has an inscription area 19.1 mm. in diameter as opposed to 15.9 mm. for the smaller dirhems. This means about a 40 percent increase in the size of the area. From the point of view of legibility, important for this particular coin, the advantage of the larger dimension is obvious.

The significance of this coin, then, is great indeed. Numismatically, it is an unequivocal example of the use of a coin as propaganda in the strict sense of the word. It was made to be read and was aimed at a specific audience. It does not commemorate or record a fact; it makes a plea and a promise. It makes a plea for loyalty to Maḥmūd on the part of the Ḥanafī-Mu'tazilī faction during his absence, and it promises support for them on his return.

Historically, its significance is even greater. It is the earliest numismatic reflection of the dynamic theological and legal divisions in mediaeval Sunni Islam, and it provides rare contemporary documentation of the importance of local religious political factions in the history of the great mediaeval Islamic cities. As such, it is of great utility in the reconstruction of a complex and misunderstood political climate.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

THE COPPER COINS OF THE LATER KINGS OF CILICIAN ARMENIA

(PLATE XXII)

PAUL Z. BEDOUKIAN

The existence of copper poghs of Levon the Usurper (1363–1365) and Gosdantin IV (1365–1374) has only lately come to light. Recent acquisitions by the writer and others of poghs issued by these kings of Cilician Armenia are reported in this paper. The whole series of the coinage of this kingdom is now complete, with the possible exception of gold coins.[1]

It is interesting that of the 3000 copper coins examined before the publication of the author's book on the coinage of Cilician Armenia, only 101 were struck by the last five kings of this dynasty. Moreover, none of the typical copper coins (poghs) could be attributed to Levon the Usurper or Gosdantin IV who were represented only by copper billons struck with dies used for silver coins (takvorins).

The known specimens were distributed as follows:

Guy or Gosdantin II (1342–1344)	2 specimens of typical poghs
Gosdantin III (1344–1363)	21 specimens of typical poghs
Levon the Usurper (1363–1365)	No true copper poghs. 14 copper billons struck with takvorin dies.
Gosdantin IV (1365–1374)	No true copper poghs. 45 copper billons struck with takvorin dies.
Levon V (1374–1375)	19 specimens of typical poghs.

Thus, out of 3000 copper coins attributed to the fourteen kings of the Cilician dynasty, only 101 belonged to the last five kings and, of these, 42 were poghs and 59 were copper billons.

In the past few years, several large accumulations of copper coins (numbering in the thousands) have found their way into the hands of dealers—among them a number of copper poghs belonging to the later kings, including Levon the Usurper and Gosdantin IV.

[1] See Paul Z. Bedoukian, *Coinage of Cilician Armenia*, *NNM* 147 (New York, 1962).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

It was not difficult to make the attribution of certain poghs to Levon the Usurper since he spelled his name ԼԵՎՈՆ whereas the other five Levons used ԼԵՒՈՆ. The attribution of poghs to Gosdantin IV was made on the basis of style, type of legend, and weight. For example, the copper coins of Gosdantin I are much larger and of a different type than those of the later kings.[2] The second Gosdantin, a Lusignan prince, was called Guy, so that there is no confusion between his coins and those of Gosdantin IV. The only remaining problem was that of distinguishing the coins of Gosdantin III from those of his homonymous successor. Examination of the many known specimens of poghs of Gosdantin III and the recently found poghs bearing the name Gosdantin pointed up some basic differences. The former are larger, better made, and the lettering is much more artistic—differences readily apparent. Some confirmation of this attribution is seen in the way that the average weight of the Gosdantin IV coppers fits neatly between those of Levon the Usurper and Levon V, in a pattern of steadily descending weights.

The design of the coins of the later kings shows a general similarity, although the gradual deterioration of workmanship is apparent. On the obverse, the king is seated on a bench-like throne, wearing a crown and vestments very much like those appearing on the silver trams of Levon I. The king holds a cross in his right hand and a fleur-de-lys in his left. The fleur-de-lys is clear on the poghs of Guy, but on some of the poghs of Gosdantin III, it has taken the appearance of a cross. This is also true of the poghs of Levon the Usurper. On all the poghs attributed to Gosdantin IV, the king's image is so poorly done that one sees a cross-like object in the king's left hand, while the right arm is barely visible and is partly fused to the body. On the reverse of these poghs is a simple cross, sometimes ornamented, as on the large tanks of Hetoum I.

The poghs of Levon V show a variation in the design. The characteristic lion of Cyprus (Levon V was from Cyprus) is represented on the obverse, walking right as a rule, left more rarely. The usual cross appears on the reverse.

As was the custom, the legend on the obverse states the king's name, and on the reverse, the fact that it was struck in Sis (Tarsus).

[2] Bedoukian, *NNM* 147, pp. 91, 335f., p. 38.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The present record of the poghs issued by the later kings of Cilician Armenia is as follows:

	Average Weight in grams	
Guy or Gosdantin II	1.36	3 specimens known
Gosdantin III	1.30	Many known
Levon the Usurper	1.25	8 specimens known
Gosdantin IV	0.95	5 specimens known
Levon V	0.80	Many known

Although there is some variation in the weights of the copper coins of each king, these variations may be considered normal and do not invalidate the significance of the average weights.

Some questions still remain unaswered. It is not clear why we have so few specimens of poghs struck by Gosdantin IV who ruled for nine years and so many more coins of Levon V who ruled for less than a year. It is also difficult to understand why the last five kings of Cilician Armenia issued large numbers of silver coins (grossly debased) and relatively few coppers. Examination of the rare poghs showed that they were all struck from different dies, an indication that these copper coins were issued with some regularity.

We can hazard a guess that one reason for their comparative rarity is that because of their small size and poor workmanship, they were more apt to be lost or discarded in the course of centuries than the silver coins. It is also possible that more of these coins in private hands will now be recognized and reported. The following illustrations will facilitate the reading of the legends on these coins.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN



Կի

1

GUY





ԿՈՍ.

2

GOSD. III





ԿՈՍ.

3

GOSD. III



Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



Լեւոն

4

LEVON



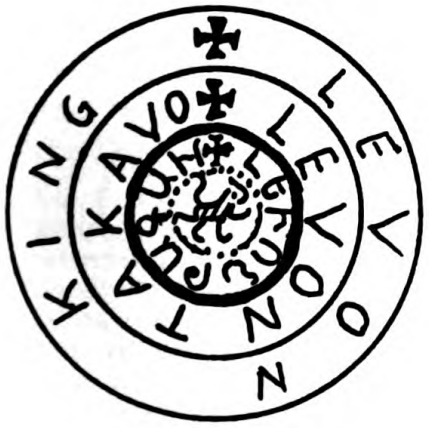


կոնս. Դ.

5

GOSD. IV

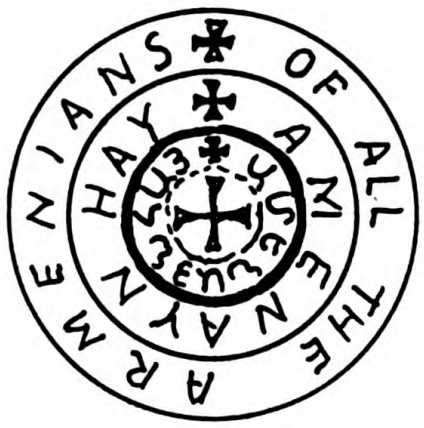




Լեւոն ե.

6

LEVON V



Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

THE "URDŪ" ISSUES OF EMPEROR AKBAR

(PLATE XXIII) L. N. KUKURANOV

A rare heavy mohur, struck by Akbar (963–1014 H./A.D 1556–1605) and bearing the mint name "Urdū," was recently presented to the American Numismatic Society by the author. This addition to the Society's Mughul series prompts discussion of Akbar's "Urdū" issues.

Akbar URDŪ (*Camp*) 987 H./A.D. 1579

Obv.: The Kalimah in quatrefoil. In corners from top left clockwise, the customary naming of the four Orthodox Caliphs.

Rev.: In foliated lozenge, Akbar's name and title and the Hijrah date. In corners, خلد ملکه ضرب اردو

Ⱥ, ANS, 12.05 gr./186 grains, 20 mm. (square-shaped).

(PLATE XXIII, 1)

Over six decades ago the late Rev. George P. Taylor, while discussing the Mughal emperors' mints listed by Oliver Codrington and by R. Burn,[1] indicated many duplications due to the inclusion in these lists of quite a few mints repeatedly appearing under different names, and suggested a corresponding reduction in the number of mints listed.

Among the mints of this category, Taylor included the Royal Camp mint of the Mughal emperors, "Urdū," which figures in both mentioned works under three variant names: "Urdū" اردو (camp); "Urdū Zafar Qarīn" اردو ظفر قرین (camp associated with victory);[2] and "Urdū dar rah-i-Dakhan" اردو در راہ دکھن (camp on the road to the Dakhan [Deccan]).[3]

[1] G. P. Taylor, "On Two Recent Mint Lists," *Journal of the Asiatic Society of Bengal* (1904), *Numismatic Supplement* III, article 24, pp. 9–14 [376–381], referring to O. Codrington, *A Manual of Musalman Numismatics*, *Asiatic Society Monographs* Vol. 7 (London, 1904), pp. 127–197; and R. Burn, "The Mints of the Mughal Emperors," *JASB* 1904, pp. 75ff.

[2] PLATE XXIII, 2. *Ⱥ*, ANS, 10.55 gr./162.8 grains, 22 mm. (Akbar).

[3] PLATE XXIII, 3. C. J. Brown, *P. M. Cat.*, *Lucknow*, II, no. 1280, pl. 6 (Jahāngīr).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

On the surface, the soundness of Taylor's observation seems obvious: the addition in the coin legend of an honorific description to the word "camp" does not change the main fact that the coins bearing such legends were issued from the mint accompanying the emperor's camp.

Nevertheless both R. B. Whitehead and C. R. Singhal subsequently published lists of the Mughal mints which included the three names of the Royal Camp mint as three separate mints.[4] Neither author defended this continued division in the light of Taylor's proposal but Whitehead, in another place, did offer the reasonable statement that the separation was retained for the sake of "convenience."[5]

One is inclined to agree that the separation, in some form, should be retained, if for no other reason than to permit the ready identification of the form of the mint name used in each case. It is to no one's advantage to lose sight of the fact that the honorific descriptions accompanying the word "Urdū" do have meaning and, in the case of Akbar's gold coin with "Urdū" alone, there is evidence to indicate that the omission of an honorific has meaning also.

The practice in India of issuing coins from a traveling camp mint was inaugurated by the first emperor of Hindustan, Babur. His earliest published Royal Camp issue bearing merely the mint name "Urdū" is a dirham dated 937 H. (A.D. 1530/31) which is known in at least three examples.[6]

The next published camp issue, of the "Urdū Zafar Qarīn" variety, is a mohur of 984 H. of exceptionally fine workmanship.[7] Similar gold pieces, but of 985 H., are also known,[8] as are silver issues of 987, 988 and 989. Issues dated 1000 H. of the "Urdū Zafar Qarin" type are quite common in all three metals, as witnessed by their presence in all important museum collections of Indian coins so far published. The undated copper coins of this type are also common but scarce in

[4] R. B. Whitehead, "The Mint Towns of the Mughal Emperors of India," *JASB* 1912, pp. 443ff.; C. R. Singhal, *Mint-Towns of the Mughal Emperors of India*, Numismatic Society of India, *Memoir* No. 4 (Bombay, 1953), pp. 33ff.
[5] R. B. Whitehead, *Cat. of Coins in the Panjab Museum, Lahore*, Vol. II (Oxford, 1914), p. xxxviii.
[6] *P. M. Cat., Lahore*, no. 1, pl. 1, 1; Whitehead, *NC* 1923, p. 116 (duplicate of Lahore specimen); *Cat. of Mughal Coins, Lucknow, Suppl.*, no. 1/6791.
[7] *I. M. Cat., Calcutta*, Vol. III, pt. 1, no. 100, pl. 2.
[8] *NC* 1923, p. 125, BM and ANS (pl. 6).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

gold and silver. Finally, Akbar's "Urdū Zafar Qarīn" specimens with Ilāhī dating, in copper only, are also quite common.

In striking contrast to the fairly numerous "Urdū Zafar Qarīn" coins stand Akbar's extremely rare Royal Camp pieces bearing the mint name "Urdū" alone, all of which are dated 987 H. However, the British Museum mohur, presented by C. S. Gulbenkian,[9] was struck from different obverse and reverse dies than were used to strike the ANS specimen. Similarly, the rupee which was in Wright's collection[10] differs from the rupee in the BM.[11]

In any case, the extreme paucity of both gold and silver coins of Akbar's Royal Camp mint named simply "Urdu," without any military honorific epithet, tends to indicate that this issue was not intended for general circulation, but rather for limited distribution as mementos of a special event which took place in 987 H. A Royal Camp mintage omitting the usual emphasis on military glory so dear to Akbar's heart most likely would have originated when the Emperor's thoughts were preoccupied with matters of a nature totally apart from warlike ambitions.

Akbar's last pilgrimage to the shrine of the Muslim saint, Muʿīn-al-dīn of Ajmer, started in the lunar month of Rajab, 987 H. (September, 1579).[12] V. A. Smith points out that at that time Akbar's religious innovations, unacceptable to Muslims true to the teaching of the Prophet, aroused such "widespread resentment" as to alarm the emperor. Smith states "In September 1579 Akbar, although no longer a sincere believer in the efficacy of the prayers of Muslim saints, made a pilgrimage, as had been his annual custom, to the shrine at Ajmer .... Abū-l-Fazl candidly states that he made this special visit as 'a means of calming the public and enhancing the submission of the recalcitrants.' He never went again, but in the year following (1580) sent Prince Daniyal as his representative."[13]

[9] PLATE XXIII, 4. H. N. Wright, "Notes on Some Rare Gold Mughal Coins Acquired by the British Museum," *Journal of the Numismatic Society of India*, Vol. I (1939), p. 43, pl. 8.
[10] *I. M. Cat., Calcutta*, III, p. lxxxi.
[11] *BMC* 128, pl. 4.
[12] V. A. Smith, *Akbar the Great Mogul, 1542–1605*, 2nd ed. (Oxford, 1919), p. 455 (chronological summary).
[13] Smith, *Akbar*, p. 101.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

If Akbar's closest friend and historiographer Abū-l-Fazl indicated the real, obviously political, purpose of this last pilgrimage of the Emperor, the likelihood of Akbar having ordered the striking at the Royal Camp Mint of a limited number of gold and silver coins for distribution to high dignitaries as fitting souvenirs of his last devotional journey would appear logical as a further means of "calming the public."[14] With the latter object in mind, Akbar, on his return trip from Ajmer, "caused a lofty tent *(bargah)* to be furnished as a travelling mosque, in which he ostentatiously prayed five times a day, as a pious Muslim should do."[15] Finally, the particular artistic refinement in the engraving of the dies for these coins is a further indication that they were designed to serve a certain special aim of the Emperor.

[14] C.R. Singhal, *Cat. of Mughal Coins, Lucknow, Suppl.*, p. 4 and no. 164/22831, reports a unique copper quarter tanka of Akbar with mint name "Urdū" alone. The inscription is clearly fragmentary and a close study of the specimen may well reveal it to be of the "Urdū Zafar Qarīn" variety with the honorific off-flan. In any case, the presence of a month-date, employed by Akbar only after 998 H., removes this specimen from consideration of those coins dated 987 H. on which the mint is named "Urdū" alone.
[15] Smith, *Akbar*, pp. 181f.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

PLATES

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN



AFGHANISTAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



AFGHANISTAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



1 2 3 4 7 8 5 6

EARLY ALEXANDER COINAGE AT SELEUCIA

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

IV



9 10 11

12 13 14

15

EARLY ALEXANDER COINAGE AT SELEUCIA

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



16 17 18

19 20 21

22

EARLY ALEXANDER COINAGE AT SELEUCIA

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

VI



A B

EARLIEST TRIOBOLS OF MEGALOPOLIS



1 2 3 4

5 6 7 8 9

ORIGIN OF ROMAN DIDRACHMS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



1



2



3

ANS MEDALLIONS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



4





5





6



ANS MEDALLIONS

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



7





8





9



10



10



ANS MEDALLIONS

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



11





12





13



ANS MEDALLIONS

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



14







16



17



17



15



ANS MEDALLIONS

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



18





21





19





20



ANS MEDALLIONS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



22





25





23



ANS MEDALLIONS

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



24







27



28



28



26



ANS MEDALLIONS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



29





30





31



ANS MEDALLIONS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



33



32





33



34



35







36



ANS MEDALLIONS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



37





38



40







39



ANS MEDALLIONS

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



41





42





43



ANS MEDALLIONS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0




1



2



2

NEW ANONYMOUS BRONZE OF CONSTANTINE X




3



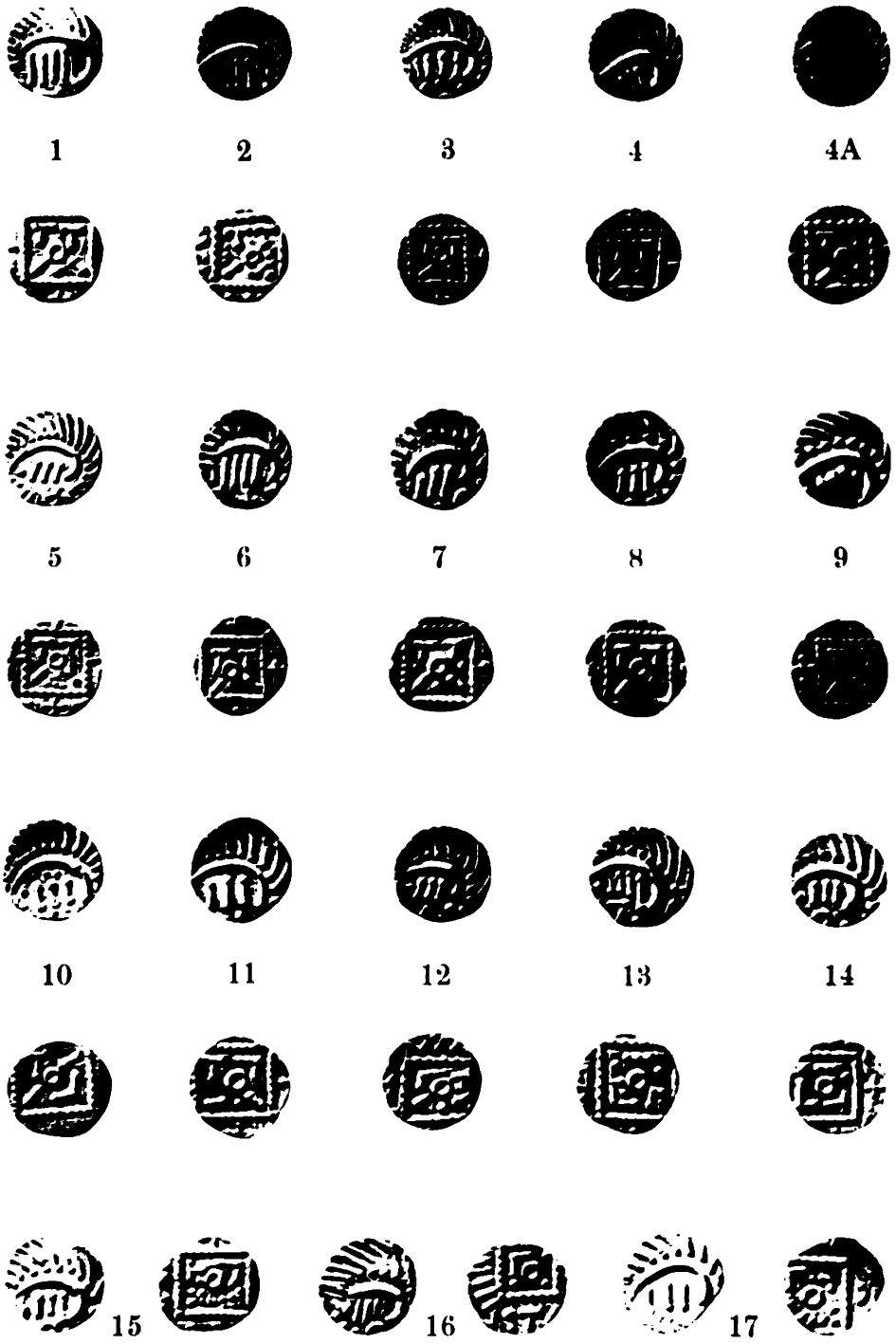
4



4

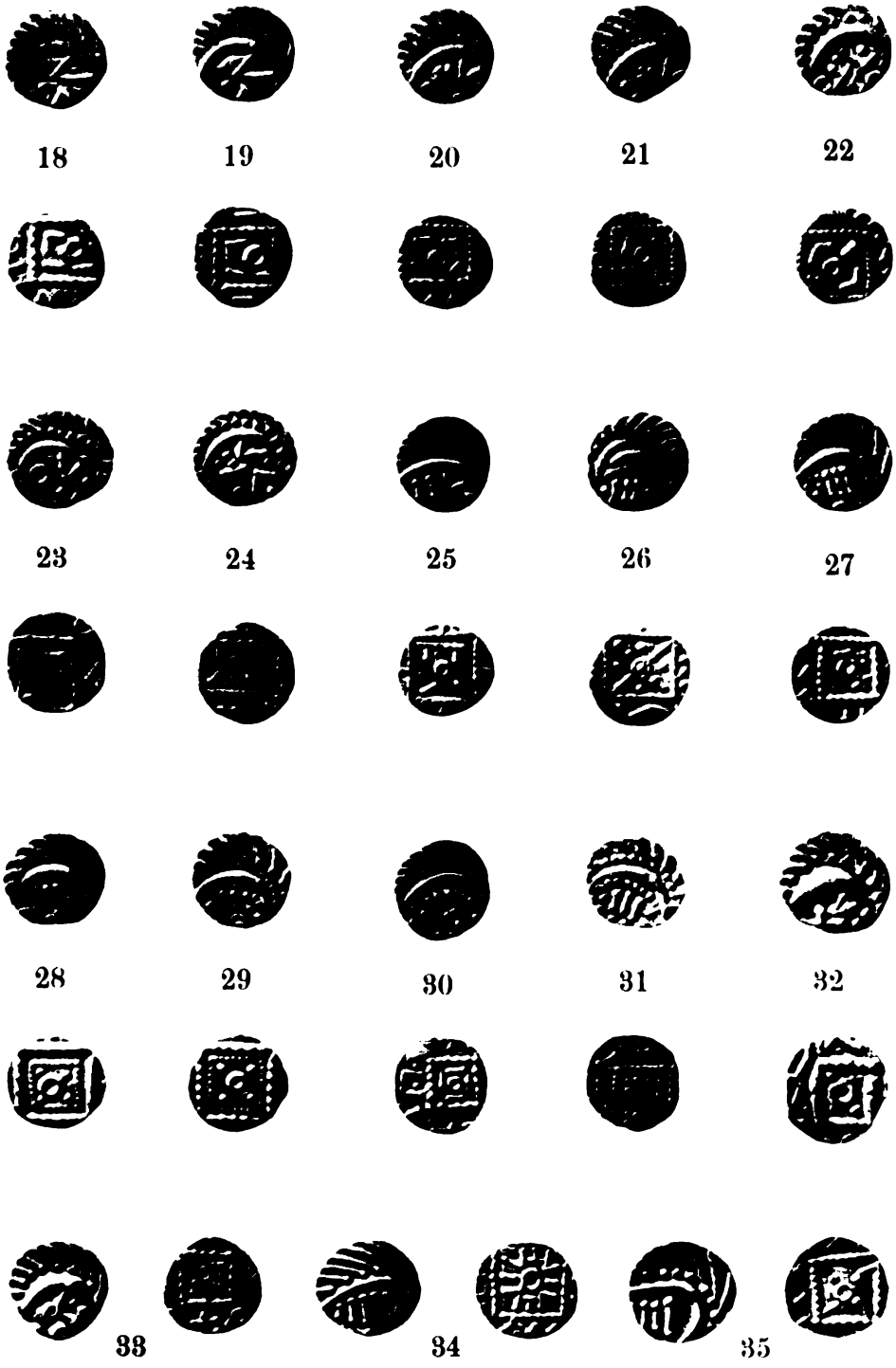
ALEXANDER/MACEDONIA CONTORNIATE

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



HOARD OF "PORCUPINE" SCEATTAS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



18 19 20 21 22

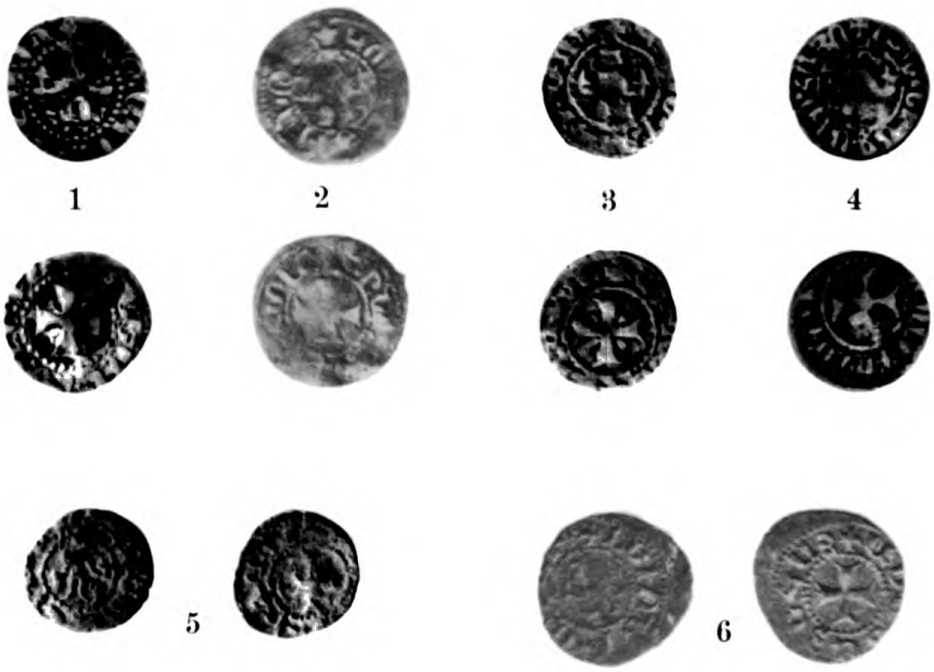
23 24 25 26 27

28 29 30 31 32

33 34 35

HOARD OF "PORCUPINE" SCEATTAS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



COPPER COINS OF CILICIAN ARMENIA



MAHMŪD OF GHAZNA

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



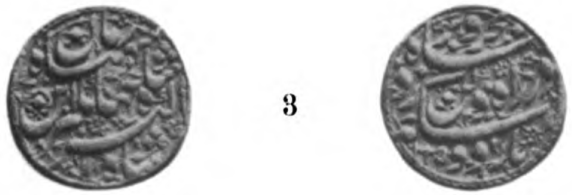
1



4



2



3

"URDŪ" ISSUES OF AKBAR

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

THE AMERICAN NUMISMATIC SOCIETY

MUSEUM NOTES

16



C 67

THE AMERICAN NUMISMATIC SOCIETY
NEW YORK
1970

Digitized by Google
Original from
UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE AMERICAN NUMISMATIC SOCIETY

Founded 1858 · Incorporated 1865

BROADWAY BETWEEN 155TH & 156TH STREETS

NEW YORK, N.Y. 10032

PURPOSES: The Society was founded for the collection and preservation of coins, medals, decorations and paper money and for the investigation of their history and other subjects connected therewith.

MEMBERSHIP: Applications for membership are welcomed from all interested in numismatics. Inquiries regarding membership should be addressed to the Secretary of the Society.

DUES: The annual dues for an Associate Membership are $10.00. Issues of the *Notes and Monographs*, *Museum Notes* and *Numismatic Literature* are distributed to all members.

PUBLICATIONS: The *Numismatic Notes and Monographs* consist of separately issued publications, each on a single topic, of which usually several appear each year. *The American Numismatic Society Museum Notes* is a publication, irregular in appearance, consisting of brief notes and papers, principally on items in the Society's collections. *Numismatic Literature*, published twice each year, lists current numismatic publications with abstracts of their content. *Numismatic Studies* is a series accommodating works in a larger format.

MUSEUM: The Society maintains a museum located in uptown Manhattan, New York City, which houses its offices, collections and library. Collections embrace coins of all periods from their inception to modern times, medals and decorations. Selections from its cabinets are on display in an exhibition. The library, consisting of about 20,000 volumes, covers all branches of numismatics.

The museum is open to Members and the public from 9 A.M. to 5 P.M. on Tuesdays, Wednesdays, Thursdays, Fridays and Saturdays. In addition, the public exhibition is open on Sundays from 1 to 4 P.M. The museum is closed on Mondays and the following holidays: New Year's Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Election Day, Thanksgiving Day and Christmas Day.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE AMERICAN NUMISMATIC SOCIETY

MUSEUM NOTES

16

THE AMERICAN NUMISMATIC SOCIETY
NEW YORK
1970

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

ALL RIGHTS RESERVED BY
THE AMERICAN NUMISMATIC SOCIETY

PRINTED IN GERMANY AT J. J. AUGUSTIN · GLÜCKSTADT

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

CONTENTS

GREEK

RODERICK T. WILLIAMS. The Archaic Coinage of Arcadian Heraea 1

SAMUEL K. EDDY. The Value of the Cyzicene Stater at Athens in the Fifth Century 13

COLIN M. KRAAY. A Note on the Carosino and Ionian Shore Hoards 23

OTTO MØRKHOLM. The Seleucid Mint at Antiochia on the Persian Gulf 31

PHYLLIS POLLAK. A Bithynian Hoard of the First Century B.C. 45

ROMAN AND BYZANTINE

THEODORE V. BUTTREY, JR. Observations on the Behavior of Tiberian Counterstamps 57

GEORGE E. BATES. Five Byzantine Notes 69

MEDIAEVAL

PAUL Z. BEDOUKIAN. Three Notes on Armenian Coins 87

D. M. METCALF. The Mağaracik Hoard of "Helmet" Coins of Bohemund III of Antioch 95

ORIENTAL

N. M. LOWICK. Bālis: A New Ṭūlūnid Mint 111

PAUL BALOG. The Coinage of the Mamlūk Sultans: Additions and Corrections 113

PAUL BALOG. Three Hoards of Mamlūk Coins 173

HELEN W. MITCHELL. Notes on Some Mamlūk Dirhems 179

CHARLES K. PANISH. The Coinage of Ladakh 185

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE ARCHAIC COINAGE OF ARCADIAN HERAEA

(PLATE I)

RODERICK T. WILLIAMS

In the course of a study of the issues of the Arcadian Confederacy in the 5th century B.C.,[1] I found it necessary to examine the early independent issues of Heraea, the canton in the extreme west of Arcadia. Although the Heraean mint was not a major one, it seems worthwhile to insert this piece in the mosaic of the Peloponnesian coinages, since some aspects of the coinage may be of interest to the epigraphist and the student of local archaic schools of art, as well as to the numismatist.

The coinage consists of hemidrachms and obols on the Aeginetan standard with the head of Hera on the obverse, the first head of a deity to appear on Peloponnesian coins, and the ethnic on the reverse. These coins are very rare, only a few being found in the major collections of America and Europe.[2]

LOCATION OF THE MINT

It is today universally accepted that the coins of this series were actually struck by the Heraeans, but a different attribution has been proposed in the past. Sestini[3] attributed them to Heraclea in Bithynia along with coins of undoubted Heraclean origin, stating that several of the coins in his group were actually found in Bithynia. However, as Imhoof-Blumer[4] pointed out, it is not stated which of the coins were found in Bithynia, and there is no evidence that the Heraean were among them. Raoul-Rochette[5] also attributed the Heraean issues to Heraclea, first, because General Guilleminot brought his

[1] *The Confederate Coinage of the Arcadians in the Fifth Century B.C.*, *NNM* No. 155 (New York, 1965).

[2] I again express my thanks to the curators, collectors and institutions mentioned on p. viii of *NNM* No. 155.

[3] *Lettere e dissertazioni numismatiche* VII (1820) pp. 47 ff.

[4] *NZ* 1878, pp. 106–7.

[5] *Mémoires de l'Institut National de France* XVII (1948) p. 291.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

collection, which included a few Heraean pieces, from Constantinople before presenting them to the Paris Cabinet, and secondly, because M. le Baron Behr, the Belgian minister in Constantinople, informed him that he found several Heraclean coins on the site of Heraclea. But again, which coins were found there, the Heraean or the true Heraclean, is not clear. There was only one Heraean coin in the Behr Collection.[6]

No evidence for a Heraclean provenance other than the coincidence that two collectors of Greek coins, who possessed between them a few Heraean pieces, spent some time in Constantinople, has been, in fact, adduced. As far as the evidence of find-spots is concerned, Imhoof-Blumer states that he acquired in Athens two Heraean coins which came from the Peloponnese.[7]

Briefly, the arguments for a Heraean origin are as follows:

1. Technique: there are comparanda in the Peloponnese for the die pattern of the reverse (see p. 8, and no. 1).

2. Letter forms: these are archaic Arcadian (see Jeffery, *Local Scripts of Archaic Greece*, pp. 207ff.).[8] For Heraclea one would have expected an initial *eta* in the ethnic.

3. Weight standard: the Aeginetan standard was the regular Peloponnesian standard (cf. the 5th-century Arcadian coins with the same denominations).

4. Ethnic: on one reverse, R. 11, the 4th letter of the ethnic is given as *iota*; this in itself should rule out a Heraclean attribution.

The Catalogue[9]

Period I. ca. 510–500 B.C.

1. **O.1:** Head of Hera to left. The eye is long and narrow, the mouth summarily cut in a triangle with the apex at the right. The hair below the stephane is beaded, a cloak falls over the head; the vertical folds flare toward the back and a beaded line defines the forward edge. A beaded necklace is set just above the truncation.

[6] Lenormant, *Description des médailles et antiquités composant le cabinet de M. Le Baron Behr*, no. 347.
[7] *NZ* 1878, p. 107, n. 90.
[8] To Dr. Jeffery's work my debt is obvious; I trust I have not abused it.
[9] The die axis is variable and has not been included. The asterisk preceding an antry indicates that the piece is illustrated.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

R.1: 𐤇 in a dotted rectangle, the left side of which is broken by a "lane" lined with dots; on either side of the "lane" appears a deep L-shaped incuse, deeper than the overal incuse.

The shape of this incuse suggests a Greek altar. At the left is the ramp lined by dots leading to the altar proper.[10] Heraea had, of course, a temple of Hera,[11] of which the altar would have been an indispensable part, while the head of Hera on the obverse may be a representation of the head of the cult statue.

*(a) Berlin (ex Imhoof-Blumer). 2.99. Imhoof-Blumer, *Monnaies Grecques* 190, pl. E, 7 = Babelon, *Traité* II, 1, no. 1211 (figured) = Regling, *MaK* 84 = Lambros, *Coins of the Peloponnese* pl. 14, 1 = Milne, *Greek Coinage* pl. 5, 1 = Williams, *NNM* 155, pl. 14, b (obv. only).
Obv.: flaw beneath the chin, unless this is a representation of the far side of the cloak.

2. **O.2:** Similar, but the forward edge of the cloak is defined by a raised line, not beads, and the far edge is indicated running from the mouth down to the forward edge of the truncation.

R.2: 𐤇𐤐 in a dotted square, all within a square incuse. It is probable that the small pile of beads under the lowest bar of the *epsilon* is a flaw.

*(a) New York (ANS). 3.01. Naville X, 607.
(b) Boston (Brett 1237). 3.12.
(c) London (*BMCPelop.* 1, pl. 34, 1). 3.20.
(d) Naville V, 2255 (ex *BMCPelop.* 2). 3.01.
(e) Cambridge (*SNG* 3878). 3.02.
(f) Münz. u. Med. = Weber 4279. 2.98.
(g) Florence (Uffizi). 3.13. Williams, *NNM* 155, pl. 14a (obv. only).
?(h) Sotheby, Feb. 1844, 1621 (not illus.). 3.14.

3. **O.3:** A rough imitation of the preceding heads of Hera.

R.3: 𐤉𐤇 in a beaded square.

*(a) London (*BMCPelop.* 3, pl. 34, 2). 3.02.
(b) Copenhagen (*SNG* 231). 2.99.
(c) Paris 311. 3.05. Babelon, *Traité* II, i, pl. 38, 7 = Raoul-Rochette, *Mémoires de l'Institut National de France* xvii, pl. v, 4 (inaccurate drawing).
(d) Weber 4281 = Naville IV, 613. 3.03.
?(e) Sotheby, June 1896, 1129 (not illus.). 2.98.

[10] Yavis, *Greek Altars*, p. 102, fig. 30.
[11] *Pausanias* VIII.26.2.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

PERIOD II. CA. 500 B.C. *Obols*

4. **O.4:** Similar, in coarse style, but to right.
R.4: 𐤟𐤇 in a dotted square.

*(a) Boston (Brett 1236). 0.89.

5. **O.4:** Same die.
R.5: 𐤟𐤇 in a beaded square.

(a) Athens 4527. 0.87.
(b) London (*BMCPelop.* 5, pl. 34, 4. 1.12. Babelon, *Traité* II, 1, pl. 38, 2.
*(c) Vienna. 0.96.

6. **O.4:** Same die.
R.6: 𐤅𐤐 in a beaded square.

(a) Copenhagen (*SNG* 233). 0.89.
*(b) London (*BMCPelop.* 6). 0.98.
(c) Berlin (C. R. Fox). 0.81.
(d) Behr. Lenormant, ***Description des médailles et antiquités composant le cabinet de M. Le Baron Behr***, p. 347, pl. 1, 6. The form of the letters on pl. 1, 6 (a drawing) does not correspond with that in the text, so that the classification here cannot be regarded as certain.
Rev.: there is a flaw (or line) running under the lowest bar of the *epsilon* and under the upright of the *rho*.

PERIOD III. CA. 480–470 B.C.

7. **O.5:** Head of Hera to left in a more developed style. The face is less fleshy. A vertical fold of skin defines the outside of the mouth, while the sterno-mastoid is clearly modeled. The nose is narrow and the nostril long. The eye is long, and the lids slightly open at the inner corner. The hair both below and above the stephane is rendered not in beads but by uneven lines. The cloak covers less of the head.
R.7: 𐤀𐤟𐤇 with beads above and below, all in an incuse square.

(a) Paris 308. 2.95. Raoul-Rochette, *Mémoires*, pl. 5, 1 (drawing).
(b) Cahn, *Griechische Münzen archäischer Zeit*, pl. 20.
*(c) Berlin (Imhoof-Blumer). 2.85. Williams, *NNM* 155, pl. 14c (obv. only).
Obv.: slight flaw at upper lip.
Rev.: flaw on right edge of die.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

8. **O.5:** Same die.
R.8: A¶E with a pattern of zigzags and beads above and below, all in an incuse square.

*(a) London (*BMCPelop.* 7, pl. 34, 5). 2.95.
(b) Berlin (Imhoof-Blumer). 2.97.
(c) Paris, Expo. 826. 2.91. Babelon, *Traité* II, 1, pl. 38, 1 = Seltman, *Greek Coins* pl. 13, 6.
(d) Boston (Brett 1238). 3.02.
(e) Paris, Expo. 827. 2.90. Babelon, *Traité* II, 1, pl. 38, 3 = Raoul-Rochette, *Mémoires*, pl. 5, 2 (drawing).
(f) Leningrad 10093. 2.52.
Obv.: flaw at upper lip worse in (f).

9. **O.6:** Head of Hera to left. The cloak, in three folds, falls below the level of the ear. The features are again fleshier. The lips are full, the eye much wider and the pupil prominent. The hair, as in O.5, is rendered by lines, but the lines are still arranged in arcs forming a fringe along the brow. The earring is composed of three stones. The truncation is beaded.
R.8: Same die.

(a) London (*BMCPelop.* 8). 2.92. Gardner, *Types* pl. 3, 25 (obv. only).
(b) Copenhagen (*SNG* 232). 2.82.
(c) Berlin (C. R. Fox). 2.93.
(d) Paris 310. 2.73. Raoul-Rochette, *Mémoires*, pl. 5, 3 (drawing) = Babelon, *Traité* II, 1, pl. 38, 4.
(e) Athens (on exhibition).
*(f) New York (ANS) = Naville IV, 612 = Naville X, 608 = Weber 4280 = Regling, *MaK* 83 = Williams, *NNM* 155, pl. 14d (obv. only). 2.91.
(g) Oxford. 2.91.
(h) Berlin (Löbbecke). 2.70.

Obol

10. **O.7:** Head of Hera to left very similar to O.6 and probably by the same hand.
R.9: EP in a beaded square.

*(a) London (*BMCPelop.* 9, pl. 34, 6). 0.92. Babelon, *Traité* II, I, pl. 38, 6.
Obv.: flaw down nose and mouth.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

PERIOD IV. (CA. 480– CA. 475 B.C.)?

11. **O.8:** Head of Hera to right. The only recorded specimen is poorly preserved.
R.10: A𐤀𐤀 between two rows of beads, all in an incuse square.

*(a) London (*BMCPelop.* 4, pl. 34, 3). 2.98.
Obv.: flaw in front of mouth.
Rev.: flaws between *epsilon* and edge of incuse, and to left of *alpha*.

12. **O.9:** Head of Hera to left in a somewhat coarse style. The hair is rendered by two rows of large beads. The cloak covers much of the head in a series of irregular folds.
R.11: Between two rows of beads, EP𐤀. The *iota* is set above and very slightly to the right of the *alpha*. It is clear that the *iota* is not a flaw because the *alpha* has been lowered to make room for it. The top of the *iota* runs between the beads, but the temptation to see the *iota* as a fragmentary *digamma* has been resisted. Why the *iota* should have been placed above the *alpha* is uncertain, but the most likely explanation is that the engraver, having been instructed to insert more than the customary three letters on the die, found that there was room for the last two letters only by placing the one above the other.

*(a) Berlin (Prokesch-Osten) = Williams, *NNM* 155, pl. 14e (obv. only). 2.84.

Obol

13. **O.10:** Head to left, the details of which are uncertain.
R.12: 𐤁𐤁 in an incuse square (no beads).

(a) Athens 4526. 0.72.
*(b) New York (ANS) = Grabow, July 1930, 432. 0.85.

PERIOD V. CA. 470 B.C.

14. **O.11:** Head to right without a cloak. The hair is arranged in a *krobylos* and rendered by large beads in front of the beaded stephane and by small beads run together in

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

concentric circles above the stephane. The cheeks are full and formless, the nose large.

R.13: ERA: above and below, a line and a row of beads, all within an incuse square.

(a) Berlin 9267. 2.29. (Obv. doublestruck).
*(b) London (*BMCPelop.* 10, pl. 34, 7). 2.58. Head, *NC* 1873, pl. v, 5 = Babelon, *Traité* II, 1, pl. 38, 5 = Lambros, *Coins of the Peloponnese* pl. 14, 2.
(c) Munich. 2.73.
(d) Hirsch XIII, 2805 = Williams, *NNM* 155, pl. 14f (obv. only).

15. **O.12:** Head of Hera to right. The back of the head is again covered by a cloak. The hair is rendered by small beads on both sides of the stephane, which consists of a row of beads above a plain band. The pupil is very small between large lids. The nose and the mouth are off the flan of the only recorded specimen, but the shape of the cheek resembles that on O.11.

R.13: Same die.

*(a) Berlin (Löbbecke). 2.68.
Rev.: flaw on the upper line of beads.

Analysis of the Coinage and Chronology

In the absence of any hoard or overstrike evidence and since there is no stylistic relation between the heads of Hera on the obverses of the Heraean issues and those of the goddess on the confederate coins of Arcadia,[12] the chronology must be established largely from the form of the letters in the ethnic.

Periods I and II. ca. 510–500 B.C.

The forms of the letters on the earliest Heraean coins are 𐌄 and 𐌉. Jeffery[13] shows the following forms used in Arcadia in their order of development:

𐌄 (1) 𐌄 (2) 𐌄 (3) E (4)
𐌓 (1) 𐌓 (2) 𐌓 (3)

[12] Williams, *NNM* 155, pp. 8–9.
[13] *Local Scripts*, p. 206.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

On the first five Arcadian inscriptions recorded by Jeffery the tailed *epsilon* with sloping bars (1) is constant, as is the tailless *rho* (1). These inscriptions are dated to the 2nd half of the 6th century B.C.: inscription no. 1 to ca. 550–525 (?), nos. 2–4 to 525 (?), and no. 5 to ca. 525–500. On the basis of this chronology, Period I of the Heraean coinage should belong to ca. 550–500 since it too shows the tailed *epsilon* with sloping bars (1) and the tailless *rho* (1).

Jeffery's inscription no. 6, the Agemos statue, has *epsilon* with sloping bars but no tail (3), which she dates to the end of the 6th century (p. 209). No. 7, the bronze statuette dedicated to Pan by Phauleas, is dated to ca. 510–500 and has a straight-barred *epsilon* with tail (2). No. 8, the companion of no. 7, has sloping bars but no tail (3) and is dated to ca. 500. To these inscriptions must be related the Heraean Period II, which shows *epsilon* with straight bars and tail (2). Thus on epigraphic evidence alone, while Period II may belong to the last decade of the 6th century, Period I may go back to ca. 550. Numismatic and historical probability may narrow the bracket at the upper limit.

It may be significant that on the Athenian owls, following Kraay's reclassification of Seltman's grouping,[14] the *epsilon* with sloping bars occurs only on the earliest Group H; thereafter Jeffery's *epsilon* (4) is regular. The style of the Athena heads, at least on the smaller denominations,[15] bears some resemblance to the Heraean heads of Period II in the forward position of the nose in relation to the tip of the chin. If Kraay is right in postponing the introduction of the owls to ca. 525, this date should be the *terminus post quem* for the Heraean issues, for it is unlikely that provincial Heraea should have been the first city on the Greek mainland to introduce the human head on coins, preceding Athens and Corinth.

The technique of the earliest Heraean reverse may be closely related to that of the early Mantinean and Argive coins. Babelon has already compared the first Heraean reverse (R.1) with those of Argos, Cleonae and Mantinea, which have a pair of sunken squares similar to those on R.1, and supposed "commercial relations" among

[14] Seltman, *Athens;* Kraay, *NC* 1956, pp. 43–68.
[15] See, e.g., Kraay, *Greek Coins*, pl. 116, 354.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

these states.[16] It cannot be denied that there is a similarity at least among the Heraean, Argive and Mantinean coins. However, the deep-sinkings (L-shaped in the case of Heraea; square in the other two) which the coins have in common are not so much a sign of commercial relations as a technical device shared by these Peloponnesian mints. On the reverse die these shapes would be in high relief and would be useful for obtaining an initial purchase into the silver with the first stroke of the hammer. A second blow, if required, could be given without much risk of moving the reverse die and causing a double strike. In a new mint with inexperienced operators, such a safeguard might have been thought advisable at first. At Heraea it was abandoned after the first die, but was retained at Mantinea and Argos. The only conclusion that can be drawn from the early coins of these mints is that they are probably roughly contemporary. The end of the 6th century is the generally accepted date for the beginning of the Mantinean and Argive coinages, although there has been no exhaustive study of either.

The search for an event to which the introduction of a coinage may be pegged is difficult in the case of the Heraeans, whose history is so little known, and it is with some diffidence that I adduce their treaty with the Eleans recorded in *SIG*[3] 9 (*Local Scripts* 220/6). Its date is uncertain. Jeffery gives ca. 500 (?); Tod,[17] the 6th century. However, the forms of *epsilon* and *rho* employed in it are the same as on the earliest Heraean dies, which, therefore, may be contemporary with the treaty. The Elis-Olympia coinage was first struck ca. 510 (or later).[18] It seems unlikely that the Heraean coinage was struck before the Elean, but, in view of the good relations between the states suggested by the treaty, and because of the contiguity of their borders, it is probable that the Heraean coins began soon after, if not at the same time as the first Elean coins. The Heraean issues seem to supplement the Elean, which, rich in didrachms and drachms, lacked the hemidrachms and obols struck by the Heraean mint.

There remains the possibility of dating the earliest head of Hera (O. 1) on stylistic grounds. This is difficult in view of its provincial

[16] *Traité* II, 1, no. 1211.
[17] *Greek Historical Inscriptions*, p. 5.
[18] Seltman, *Olympia*, pp. 1 and 12.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

quality, but there seems to be no objection to a comparison with the style of Attic vase-painting of the last quarter of the 6th century. Compare O.1, for example, with the head of Artemis on the Andokides Painter's Berlin amphora[19] or with the head of Hestia on Oltos' Tarquinia cup:[20] they have the same facial proportions and sophisticated air. Although the comparison cannot be pressed too closely, it certainly does not preclude a date of ca. 525–500 for the head of Hera. In sculpture, a more provincial comparison may be made with the heads of the pairs of dancing or fleeing girls on the metopes from the Temple of Hera, Foce del Sele, which are dated to the last decade of the 6th century.[21]

PERIOD III. CA. 480–470 B.C.

In Period III, on R.8, the *epsilon* has straight bars and the bar of the *alpha* is almost straight, although the *rho* has still not grown a tail. Jeffery, in discussing the letters on this coin, stated that it need not be earlier than ca. 475.[22] The head of Hera on O.5 is one of the finest in the series and by a competent engraver. The leanness of the features and the tautness of the skin over bone and muscle are characteristic of Tarentine (and Spartan) art.[23] The hair, cut in fine lines, is technically advanced in comparison with the archaic beading of most other dies and the rendering of the sterno-mastoid, so prominent in O.5, does not appear on Syracusan coins until the beginning of Boehringer's Group III (485 B.C.),[24] so that O.5 should not be placed earlier than this. Further, it seems to show a reflection of the Demareteion, and on this criterion it should not be earlier than ca. 480. There is no obvious comparison with Attic vase-painting that can be made. O.6, which is die-linked to O.5, is more fleshy in style, and the representations of Persephone on the Locrian terracotta

[19] Beazley, *ARV* p. 1, 1; Arias and Hirmer, pl. 85.
[20] *ARV* p. 38, 50; Arias and Hirmer, pl. 103.
[21] Zancani-Montuoro and Zanotti-Bianco, *Heraion alle Foce del Sele* I, pls. 41 ff. For the date see p. 136.
[22] *Local Scripts*, p. 210, n. 3. The coin she refers to, Babelon, *Traité* II, 1, pl. 38, 3 (= my 8e) is not the latest in the series.
[23] Ashmole, *Late Archaic and Early Classical Greek Sculpture in Sicily and South Italy*, pp. 10 ff.
[24] *Die Münzen von Syrakus*, pls. 3 ff.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

plaques dated to ca. 470, which seem a little later in style than O.6, come to mind.[25] A bracket of ca. 480–470 has been given to Period III. To place it later would conflict with the dating of Period V, which, while it has the most developed letter forms in the series, has Hera heads which it would be difficult to date much after 470.

PERIOD IV. (CA. 480– CA. 475 B.C.)?

This section comprises three die combinations which do not fit into the other relatively homogeneous sections. The styles of the Hera heads are somewhat obscure through wear, but seem coarse. Of the reverses, both R.10 and 11 have the simpler form of decoration above and below the ethnic, a ragged row of dots, which was seen in R.7, the first reverse of Period III, and earlier; R.8 and Period V have a more complicated decoration. Using this criterion, die combinations 11 and 12 could be placed at the beginning of Period III. In respect to letter forms, R.11 and 13 have *epsilons* with slightly sloping bars and thus show an earlier form of development than Period III, but have, however, *rho* with a tail. On the confederate coinage of Arcadia the *rho* with a tail first appears ca. 480 at the very end of Group I and becomes regular in Group II,[26] so that on this evidence a part at least of Period IV should be placed in the early 470's. The evidence is clearly conflicting, but the three coins have been placed in this position (although in fact they may not belong together), because their coarse style and poor technique, combined with the developed form of some letters, suggest a late rather than a primitive incompetence.

PERIOD V. CA. 470 B.C.

R.13 of Period V has the most developed letter forms in the series, showing *epsilon* with straight bars and no tail and a *rho* with a tail, and could be later than ca. 470. However, the style of the obverses O.11 and 12 and in particular the archaic beading of the hair of O.11 suggest that this section should not be placed much later, if at all,

[25] Langlotz and Hirmer, *Art of Magna Graecia*, pls. 72–3. But O.12 of Period V may be closer to the plaques in style than is O.5.

[26] Williams, *NNM* 155, pp. 36 and 54. Of course, in a period of transition letters both of earlier and more developed forms will occur.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

than ca. 470. O.12, as it appears on the flan of the only specimen, recalls the Persephone heads on the Locrian plaques more vividly than did O.6 above.[27]

One factor which sets Period V apart and points up its lateness is the weight. In Period I the average weight of the 13 specimens is 3.04 grs.; that of the 15 specimens of Period III has dropped to 2.86. But in Period V the average weight of the 4 specimens has dropped markedly to 2.57.

Conclusions

It seems then that the Heraeans began issuing their coinage in the 6th century soon after the Eleans opened up the Olympian mint. It cannot be denied, however, that the first Heraean issues could be dated later by approximately a decade, bringing part of Periods I and II down into the 5th century. Period III should not be earlier than ca. 480, so that, even if Periods I and II are dated a decade later, there will still be a gap between Periods I and II on the one hand and Period III on the other. It is possible that Period IV should be transfered to help fill this gap, but this solution does not seem likely to me. If the gap does exist, it appears that the Heraeans started issuing coins again about the same time that the Arcadian confederate coinage was increased by the opening up of two extra mints;[28] and that the Heraeans struck coins in their own name suggests that they were pursuing a policy independent of the other Arcadians.

It may never be possible to account for the gap noted above and indeed for the rather sporadic nature of the coinage as a whole, but there may be a clue in the inscribed spear-butt in the Metropolitan Museum of Art, New York, recording a defeat of the Heraeans, presumably at the hands of another Arcadian power.[29] Richter suggested a date for the spear-butt of ca. 500 (or later). If this date is correct,[30] it could be argued that the defeat accounts for this break in the coinage.

[27] *Art of Magna Graecia*, pls. 72–3.
[28] Williams, *NNM* 155, pp. 10ff.
[29] MMA.38.11.7. Richter, *AJA* 1939, pp. 194ff.
[30] Jeffery, *Local Scripts*, 215/11, dates it 500–480(?).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE VALUE OF THE CYZICENE STATER AT ATHENS IN THE FIFTH CENTURY

SAMUEL K. EDDY

Scholars have long been interested in discovering what official value Athens placed upon the electrum staters of Cyzicus. Over the years a number of answers to this problem have been proposed, ranging from 20 to 37 drachms. Until a few years ago there was growing agreement that the value was an even 24 drachms.[1] This view has recently been shown to be wrong. W. Thompson determined, on the basis of Attic inscriptions and the weights of various currencies, that a Cyzicene stater certainly was not worth an even 24 drachms, and was probably equivalent to about 25.[2] R. Bogaert, using the scanty information in the literary authorities and data on the metallic content of Cyzicene coinage, came to the conclusion that in the fifth century the market value (*le cours*) of the Cyzicene was around 28 drachms.[3] Bogaert's arguments that the gold content of the stater was nearly 50% were attacked by J. Guépin. The latter, basing his case on data obtained from analysis of Cyzicene coins by the neutron activation process, discovered that its gold content was somewhat less than 50%, and that, in consequence, Bogaert's valuation must be lowered.[4] The exact valuation of the Cyzicene at Athens, however, has remained unknown.

[1] A. M. Woodward, "Notes and Queries on Athenian Coinage and Finance," *JHS* 1914, pp. 277f.; H. T. Wade-Gery, "The Ratio of Gold to Silver during the Peloponnesian War, *IG* I², 301," *NC* 1930, pp. 31–35; J. Johnston, "An International Managed Currency in the Fifth Century," *Hermathena* XLVII (1932), pp. 136–143; B. D. Meritt, H. T. Wade-Gery, and M. F. McGregor, *The Athenian Tribute Lists*, III (Princeton, 1950), p. 266; C. Seltman, *Greek Coins*, 2nd ed. (London, 1955), p. 112.

[2] W. E. Thompson, "The Value of the Kyzikene Stater," *NC* 1963, pp. 1–4.

[3] R. Bogaert, "Le cours de statère de Cyzique aux v^e^ et iv^e^ siècles avant J.-C.," *Antiquité classique* XXXII (1963), pp. 85–119.

[4] J. Guépin, "Le cours de Cyzicène," *AC* 1965, pp. 199–203. Bogaert replied to this article in, "Encore le cours du statère de Cyzique aux v^e^ et iv^e^ siècles avant J.-C.," *AC* 1965, pp. 121–128.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

To reach a solution of this problem we may begin by establishing the approximate intrinsic value of the Cyzicene electrum stater in terms of Athenian silver drachms. Guépin analyzed nine staters and twenty-one fractional coins, sixths and twelfths, in the coin cabinet of The Hague, and he found that they contained an average of 46.3% gold. Since the Greeks regarded the coinages of both Cyzicus and Athens as pure precious metal, we can overlook the small amounts of copper present in both currencies.[5] The average weight of a Cyzicene was 16.00 grams.[6] Therefore, the average stater contained .463 × 16.00 grams = 7.41 grams of gold, and 16.00 grams of electrum less 7.41 grams of gold = 8.59 grams of silver. The ratio between gold and silver at this time is not known with absolute certainty. If it was 13.3 to 1 (the usual figure),[7] the value of one electrum stater in terms of Attic silver was 7.41 grams × 13.3 + 8.59 grams of silver, a total of 107.14 grams of silver. Since one Athenian drachm weighed 4.36 grams,[8] one stater had the intrinsic value of 107.14 grams of silver divided by 4.36 = 24.57 drachms, or, as the Greeks would have said it, 24 drachms, three or four obols. If the ratio of gold to silver was 13.26 to 1, as Bogaert suggested,[9] then the stater had an intrinsic worth of 7.41 grams of gold × 13.26 + 8.59 grams of silver = 106.85 grams of silver. This, divided by 4.36, gives 24.51 drachms, or 24 drachms, three obols.

These are theoretical results that are based on modern, scientific methods of analysis of the metallic content of Cyzicene electrum—

[5] Bogaert, *AC* 1963, p. 93 and n. 37.

[6] This weight is based on the nine specimens listed in Guépin, *AC* 1965, and the seventeen in M. Hirmer and C. M. Kraay, *Greek Coins* (London, 1966), p. 369. See too, Bogaert, *AC* 1963, pp. 91f.; Thompson, *NC* 1963, p. 3.

[7] B. V. Head, *Historia Nummorum*, 2nd ed. (Oxford, 1911), p. xl; P. Gardner, *A History of Ancient Coinage* (Oxford, 1918), pp. 224–232.

D. M. Lewis in "New Evidence for the Gold-Silver Ratio," *Essays in Greek Coinage Presented to Stanley Robinson*, ed. C. M. Kraay and G. K. Jenkins (Oxford, 1968), pp. 105–110, shows that at Athens this ratio fluctuated in the fifth century between 16.66 and 13.12%. His figures are for the relationship between gold and silver bullion, however, and not between electrum and silver currency, and those based on the prices of honorary crowns are not, as he says (p. 107), adjusted to take into account the cost of manufacture, so that his figures should be a little lower.

[8] Head, *HN*, p. 370; Gardner, *History*, p. 224.

[9] Bogaert, *AC* 1963, pp. 98f. and n. 61.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

methods which the ancients could not have used. The Greeks had to make their analyses with touchstones of much smaller accuracy. On the other hand, they certainly knew what the exact ratio of gold to silver was. We, therefore, require a check on the theoretical results obtained above. It is known that one Lampsacene stater was valued at an even 24 Attic drachms.[10] The average weight of a Lampsacene stater was 15.36 grams.[11] Therefore, the approximate value of the Cyzicene stater can be found from the equation $\frac{15.36}{16.00} = \frac{24}{x}$, where x equals 25 drachms. This calculation does not take into account the gold content of Lampsacene electrum, but assumes that it was equal to that of the Cyzicene.

The results of these two methods of calculation are within half a drachm of each other. The results are mutually supporting, and, taken together, show that the value of the Cyzicene stater at Athens in the fifth century fell somewhere between 24 drachms, three obols, and 25 drachms.

We must now determine exactly what the value was. We may first eliminate from consideration the possibility that the valuation was 24 drachms and a fractional number of obols, like $4\frac{1}{2}$. In ancient times the value of a currency was determined by its weight and purity. In classical Greek times the method of determining fineness was to use a touchstone. Those which were known in the fifth century were inferior to those discovered later. Around 300 B.C. the better kinds were unable to measure gold closer than two percent.[12] If the determination of relative values was based on a Cyzicene hecte, a coin which was a sixth of a stater, no valuation in fractional obols could result. Since a stater is worth 24 drachms and an unknown number of obols, a hecte is worth slightly more than four drachms, or a little over twenty-four obols. If a classical touchstone could measure only

[10] Woodward, *JHS* 1914, pp. 278–280; Bogaert, *AC* 1963, p. 105.
[11] Head, *HN*, p. 529; E. Babelon, *Traité*, I, ii, p. 187; Seltman, *Greek Coins*, p. 113.
[12] Hdt. VII.10; Plat., *Gorg.* 486D; R. J. Forbes, *Studies in Ancient Technology*, VIII (Leiden, 1964), pp. 170–172. Only in the time of Theophrastus did the Greeks discover a touchstone which could determine the gold content of an object to nearly, as we should say, two percent. (Theophr., *de lap.* VII.46; D. E. Eicholz, *Theophrastus de lapidibus* [Oxford, 1965], pp. 118–120).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

within four percent, then four percent of 24 + obols would be about .96 obols, or, say, one whole obol. A stater, therefore, would have to be worth twenty-four drachms and a whole number of obols. If the determination was based on the stater, then one obol itself is only $\frac{1}{144}$ of the stater, and a half obol $\frac{1}{288}$, amounts which could not have been calculated from the data obtainable. Therefore, the value of an electrum stater as large as the Cyzicene would not have been calculated to within a fraction of an obol, unless some purely arbitrary method of valuation was employed.

The possible choices, then, are 24 drachms, and three, four, or five whole obols, and 25 drachms. We can choose the correct one among them by means of the available epigraphic evidence. This is contained in two Attic inscriptions which give equivalences between Cyzicenes and Athenian drachms. *IG* I^2,301 is a mutilated return of the holdings of the Treasurers of Athena for 410/9, and *IG* I^2,302 is a mutilated record of moneys disbursed by the same Treasurers between 418/7 and 415/4 B.C. Just enough remains on these stones to allow the necessary determination to be made.

The exact reading of lines 120–3 of *IG* I^2,301 is important. Thompson pointed out that the last sign in line 123, which Wade-Gery had earlier read as Ḥ, must actually be Ⱨ, the sign for two obols.[13] Thompson's new reading is based on study of a photograph and squeeze of the stone, and upon examination of the inscription itself.[14] I have not seen the latter, but I have examined the photograph, and it seems to me clearly to confirm not only that Thompson's reading is correct, but also that the immediately preceding sign, which Wade-Gery read as ⸢Ḥ, cannot in fact be seen. Meritt now reads this line [I]IⱧ. These four lines of this inscription, therefore, should be read as follows:[15]

[13] Wade-Gery, *NC* 1930, p. 38; Thompson, *NC* 1963, p. 2.
[14] The photograph is in B. D. Meritt, *Athenian Financial Documents of the Fifth Century* (Ann Arbor, 1932), pl. XVI.
[15] Lines 120–122 are from Wade-Gery's text (*NC* 1930, pp. 37f.); line 123 is based on Thompson's article (*NC* 1963), my own doubt that ⸢Ḥ can be read and now, above all, on Meritt's new reading, which was privately communicated to me.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

120 ---- Κυζικενοὶ]
[σ]τατῆρες [..[4]., *v* ἀργύριον]
τ̣ουτον γ[ίγνεται ...[7]...]
[Ι]ΙΙΙ *vv*

There is insufficient space in line 121 to insert the phrase καὶ *hέκτας* (-ε), so that this inscription must record simply a whole number of staters. Therefore, Thompson's reading leads to two important deductions. First, it shows that the old restoration Κυζικενοὶ in line 120 is almost certainly correct. The other names of states which could be restored to precede the preserved word στατῆρες include Phocaea and Lampsacus, but the staters of these cities were both valued at an even 24 drachms, so that no number of whole staters could be equal to any amount of Athenian money ending in two obols. The only other possibilities are Chios and Mytilene, but their staters were scarce at Athens.[16] Second, the reading proves that a whole number of Cyzicene staters was equivalent to a number of drachms and an *even* number of obols. This fact therefore eliminates from further consideration the possible valuation of 24 drachms, three obols, because whatever the number of Cyzicenes might have been, its equivalent in Attic money must have ended in either an *odd* number of obols or a number of whole drachms. This same line also eliminates the possible valuation of 25 drachms, because any number of Cyzicene staters at this rate would always be equivalent to a whole number of Athenian drachms and no obols. Hence, we are left with the valuations of 24 drachms and either four or five obols.

Thompson also showed that the unknown number of staters and four hectes listed in *IG* I², 301, lines 99–100, are almost certainly Cyzicene.[17] His reading of lines 99–103 is as follows:

----- Κυζικεν]-
100 οἱ στατ[ῆρες ..[6]... καὶ *hέ*-]
[κ]ται τέτ̣τ̣[αρες, *v* ἀργύριον]
[τ]ούτον γ[ίγνεται ...[7]...]
[.]ΔΗΗ *v*

[16] C. Seltman, *Greek Coins*, p. 113; Thompson, *NC* 1963, pp. 2–4.
[17] Thompson, *NC* 1963, pp. 3f.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In line 103 the equivalent amount of Athenian money ends in [.]ΔΗΗΙ. The final sign, I, whatever the value of the Cyzicene stater, must be wrongly engraved. To have a termination of one obol, only one of two conditions must exist. The termination must result either from the four hectes in lines 100–101, or from a combination of x staters and the four hectes. If x staters are worth a whole number of Attic drachms, and if one stater is worth about 25 drachms, then one hecte must be worth either four drachms, one-quarter obol, or four drachms, one-half obol, because no other value for one hecte will yield a whole number of Attic obols when multiplied by four, unless a stater is valued at a sum of drachms and a fractional number of obols, which, as we have seen, is impossible.

If one hecte equals four drachms, one-quarter obol, then one stater would be worth 25 drachms, one half obol. Not only is this too high a valuation, but, additionally, whatever the whole number of staters we restore in this inscription, its termination in equivalent Attic money would be either a fractional number of obols, an odd number of obols, or a whole number of drachms. Each of these three possibilities would give results in conflict with lines 120–123, where the Attic equivalent of a whole number of Cyzicenes terminates in (probably) four obols. Hence, one hecte cannot be equal to four drachms, one-quarter obol. Second, if one hecte is equal to four drachms, one-half obol, then one stater would be worth 27 drachms. That is much too high a figure. Moreover, no matter what whole number of staters is restored in line 121, it must terminate in a whole number of Attic drachms or in three obols, which is impossible in view of Thompson's reading of line 123.

If the termination of line 103 in one obol is derived from a combination of x staters and four hectes, then one hecte must be worth less than four drachms and one-quarter of an obol, and if so (with one exception), one stater will be worth 24 drachms and a fractional number of obols, which, as we have seen, is impossible. The exception is the valuation of one hecte at four drachms, one-sixth obol. In this case one stater would be worth exactly 25 drachms, but that, as already demonstrated, is also impossible.

Returning to the two possible valuations still before us, if one stater is worth 24 drachms, four obols, then one hecte is worth four

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

drachms, $\frac{4}{6}$ obol, and four hectes are worth 16 drachms, $2\frac{4}{6}$ obols. No matter what number of staters is restored in line 100 of *IG* I², 301, the equivalent sum of Attic money will always terminate in a fractional number of obols. Similarly, if a stater is worth 24 drachms, five obols, then four hectes are worth 16 drachms, $3\frac{2}{6}$ obols. Again, no matter what number of staters is restored with the four hectes, there must always be a fractional number of obols. Therefore, it is necessary to emend the mistaken final sign in line 103 of *IG* I², 301.

The only possibilities are to change [.]ΔHH to [.]ΔHHH or [.]ΔHHC. The former is impossible, because in such a case one hecte must equal either four drachms, one-quarter obol or four drachms, one-half obol for the equivalent of four Cyzicene hectes to give a termination in an equivalent whole number of Athenian drachms, unless the stater is worth *x* drachms and a fractional number of obols. On the other hand, at the valuation of 24 drachms, five obols per stater, four hectes are equal to 16 drachms, three and one-half obols, and this is in perfect accord with the emendation [.]ΔHHC. Additionally, there are six spaces on the stone for the number of staters, and eight spaces before the ending [.]ΔHHC for their Attic equivalent. It is impossible to restore any equivalent amounts in these two places if one stater is worth 24 drachms, four obols. On the other hand, as will be shown below, this inscription can be restored at the valuation 24 drachms, five obols. Therefore, 24 drachms, five obols is the correct value of the Cyzicene stater at Athens in the fifth century.

It must now be shown that all the places in the inscriptions can be restored at this valuation. *IG* I², 301, lines 99–103 may be restored as follows:

------ Κυζικεν]-
100 οἱ στατ[ῆρες HP ΔΔΓ ⋹⋹⋹⋹⋹ καὶ *hἑ*]-
[κ]ται τέτ̣[αρες, *v* ἀργύριον]
[τ]οὑτον γ[ίγνεται XXXXHHH]
[H]ΔHC *v*. κτλ

IG I², 301, lines 120–123 can be restored to read as follows:

120 Κυζικενοὶ]
[σ]τατῆρες [ΔΔΓ ⋹⋹⋹, *v* ἀργύριον]

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

τούτον γ[ίγνεται ΠΗΔΔΔΔΓ]
[ΙΙ]ΙΙ *vv*

Line 13 of *IG* I^{2},302 includes the figure XXXX for Cyzicene staters, followed by two mutilated spaces, and the next line opens with twenty-one missing spaces, also for Cyzicenes. No number of staters can be written to fill completely this long lacuna, unless the phrase καὶ *hέκτας* (-ε) is inserted. The number of hectes to be restored must be either one or five, since the terminations of the Attic equivalents would then be five-sixth and four and one-sixth obols respectively, and these fractions would be rounded off to the nearest whole obol and written Ι and ΙΙ ΙΙ. The actual termination is preserved on the stone as ΙΙ. Assuming that the missing number of hectes was five, these lines can be completed as follows:

----- Κυζικενῶ στατῆρας XXXX [ΠΗ]-
[ΗΠΔΔΔΔ καὶ *hέκτας πέντε, v*] ἀργύριον τούτον [γίγνεται ΠΤΤΤΤ
XXXXΠΗΗΗΗΠΔΔΗ]ΙΙ. κτλ

In *IG* I^{2},302, line 58, the sum of Athenian money terminates thus: ΗΗΙΙIC *vacat*.[18] The ending of half an obol proves than an unknown number of hectes must be restored, because no number of whole staters will yield an Athenian equivalent terminating in half an obol. At the valuation of 24 drachms, five obols, only three numbers of hectes are possible, namely, two, three, or four, all of which end in a faction either close to or exactly half an obol. Two hectes are worth eight drachms, 1$\frac{4}{6}$ obols; three hectes 12 drachms, 2$\frac{1}{2}$ obols; and four 16 drachms, 3$\frac{2}{6}$ obols. The equivalent Athenian sums would be written on the stone as if they were eight drachms, 1$\frac{1}{2}$ obols; 12 drachms, 2$\frac{1}{2}$ obols; and 16 drachms, 3$\frac{1}{2}$ obols respectively.

Lines 13–14 read as follows:

χρυσίο Κυ[ζ]ικενῶ στατῆρ-
[ας .±.. καὶ *hέκτας* .±.., *v* ἀργύριον τούτον γίγνεται .±.]ΗΗΙΙIC *vacat*.

If the missing number of hectes is restored as τέτταρες, then the spaces available for the numbers of staters and drachms are only four altogether, and no restoration of the numbers can be made. Nor is it possible to find a combination of staters and three hectes and of

[18] I have used the text and the line numbers in Meritt, *AFD*.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

drachms and obols which both exactly fills the spaces available for the Cyzicene money and its Athenian equivalent, and also terminates, as the stone demands, in ΗΗΙIIC. If, however, we restore *hékta* δύο (in the dual, cf. *IG* I²,3, line 10; *IG* I²,56, line 23; and *IG* I²,76, line 49), then ten spaces are available for the two sums, and the following restoration is possible:

χρυσίο Κυ[ζ]ικενõ στατẽρ-
[ας ΗΗ𐅂ΔΣΣ καὶ *hékta* δύο, *v* ἀργύριον τούτον γίγνεται Τ𐅂Δ]ΗΗΙIIC
vacat.

In line 65 of the same inscription, the sum of Attic silver equivalent to exactly 248 Cyzicenes has been obliterated. This lost number can now be certainly restored as Τ𐅂ΓΗΗΙIII *vacat*.

A final word. These Attic inscriptions are records of amounts of Cyzicene currency kept in the public treasures or of Athens' official payments of Cyzicenes to Athenian or allied troops. The valuation of 24 drachms, five obols is the one the Athenian *polis* placed on the stater only when she disbursed them. There is good evidence that the Athenians did not accept staters paid to them at the same valuation, but instead rated the stater at only an even 24 drachms. Cyzicus, with some other states, must have paid Athens her tribute in her own money, as the postscript of tribute quota list one proves. It records, in lines 10–11, that a large sum of Cyzicene staters had been paid in, although in the text of the quota list all payments are entered in equivalent Athenian currency. In the quota list for 446 B.C. Cyzicus makes a partial payment of 4,320 Attic drachms.[19] This sum is not exactly divisible by 24 drachms, five obols, but it is evenly divisible by 24 drachms, showing that 180 staters, no hectes, were in fact paid. Other cities in the Hellespontine tribute region also paid curious sums of Attic drachms which are exactly divisible by 24 and yield round numbers of staters.[20] This also shows that the payment was made in Cyzicenes, which we know to have been a very important international currency. What this difference in valuation indicates

[19] List 8.I.95.
[20] Tenedos: List 5.III.39, V.15; 8.I.5, 102, II.108–109; 12.II.8; 13.V.6. Dardanus: List 5.III.33; 7.IV.17; 8.I.99; 25.III.31, 52. Elaeus: List 8.I.100–101; 25.III.15, 47. Madytus: List 25.III.51. Alopeconnesus: List 5.V.14; 25.III.53; 26.I.21.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

is that Athens accepted payment in Cyzicenes at a discount, collecting an agio, or exchange premium, of five obols per stater. That is nearly 3.5%—a rate which reminds one of the charge that Athens exacted, according to the Decree of Clearchus,[21] for minting non-Attic silver, namely, three drachms per mina, or, as we should say, an even three percent.

[21] IG I², p. 295 = *SEG* X.25 = *ATL* D14 = Hicks and Hill, *Sources for Greek History*, 2nd ed. (Oxford, 1951), No. 39, sec. 5.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

A NOTE ON THE CAROSINO AND IONIAN SHORE HOARDS

COLIN M. KRAAY

In the course of preparing a new edition of the *Bibliography of Greek Coin Hoards* it has been necessary for the editors to review and reassess the significance of many old reports of hoards. Sometimes new knowledge, whether of a particular hoard or of particular series of coins, has involved a major change of view about the composition of certain finds; where the detail and argumentation either has not been published before or exceeds what could conveniently be included in a bibliography, full publication and discussion elsewhere seem desirable. This note deals with two large hoards found in South Italy in the early years of this century: Noe 208, Carosino, 1904 and Noe 186, Calabria (Ionian Shore), 1908. Both were very substantial hoards each containing several hundred coins, but since both were at once dispersed, no accurate estimate of their total contents can be made.

The sources for reconstructing these two hoards are somewhat varied:

1. Noe 208, Carosino 1904
   a. Q. Quagliati "Quattro tesoretti di monete greche rinvenuti a Carosino," *Atti e Memorie dell'Ist. italiano di Numismatica*, VI (1913), pp. 3–45: a list of 76 coins acquired by the Taranto Museum.
   b. References by A. J. Evans in "The Artistic Engravers of Terina and the Signature of Evaenetos on its Later Didrachm Dies," *NC* 1912, pp. 45 and 51, n. 61, and M. P. Vlasto in "Alexander, Son of Neoptolemos, of Epirus," *NC* 1926, pp. 218ff.
   c. References to provenances from this hoard in the Vlasto Catalogue, the Jameson Catalogue and *SNGLloyd Coll.*
   d. MS list in the archives of the ANS by Vlasto of 66 Tarentine coins from the hoard acquired for his own collection together

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

with a note of various coins of Taras, Metapontum and Terina in sale catalogues known to him to be from the hoard.

2. Noe 186, Ionian Shore 1908

a. A summary account of the whole hoard by Vlasto in ΤΑΡΑΣ ΟΙΚΙΣΤΗΣ, *NNM* 15 (New York, 1922), pp. 204f.
b. Two letters written in 1920 and 1922 by J. Hirsch to S. P. Noe (in the archives of the ANS—see Appendix, p. 30 below).
c. A copy of Hirsch Cat. XXVI at Oxford with lots 281, 285–291, 294, 296 (all Thurium) and 496 (Corcyra) marked by Evans as "Hirsch find."
d. Provenances given in the Vlasto Cat., under nos. 243, 280, 292, 350, 375, 380, 413–15, where the coins are mostly misattributed to Noe 1051, though the title "Ionian Shore" is sometimes included. Noe 1051 must be wrong, since it was a late hoard including Tarentine coins of Period VIII only.
e. A manuscript list by Newell (in the archives of the ANS) of coins of Corinth, Ambracia and Leucas wrongly attributed to the Carosino hoard (see below); these must be taken in conjunction with similar coins in Hirsch Cat. XXVI.

On the evidence of these sources, and in particular from the record of theTarentine coins upon which most attention was concentrated, the two hoards were evidently buried at quite different dates for whereas Carosino contained a substantial range of Taras, Period IV, Ionian Shore went down only to the first few issues of Period III. The varieties recorded are as follows: Ionian Shore: Period III (Evans 380–345 B.C.)[1] A1, 3, 4; B1, 2; C1, 2; K1 (many and *fdc*); Carosino: Period IV (Evans 344–334 B.C.) A2 (13); B1 (2); C1 (1), 4 (1); D1 (3); H1 (12), 2 (14), 3 (11), 4 (2), 5 (4); nearly all coins of Type H were reported as *fdc*. This difference in the issues represented confirms the approximate accuracy of Vlasto's dates of ca. 360 B.C. for the Ionian Shore and ca. 336–4 for the Carosino hoard.

These two dates of burial, however, raise a problem in connection with the Corinthian pegasi, for which the evidence is as follows:

[1] A. J. Evans, "The 'Horsemen' of Tarentum," *NC* 1889, pp. 1–228.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

1. Carosino

   a. Noe under no. 208 reports "Corinth; Leucas (numerous specimens *fdc* of type Hirsch XXVI, 519); Ambracia."
   b. A MS note by Newell in the ANS archives headed "Carosino Hoard, Corinthian" which lists twenty-five pegasi from Corinth, Leucas and Ambracia (no date or source given).

2. Ionian Shore

   a. Vlasto, *NNM* 15, 205, "included also a few Corinthian pegasoi."
   b. Letter from J. Hirsch to Noe (1920), "containing a great number of pegasi" (see Appendix, p. 30).
   c. Noe under no. 186 lists "Corinth."

From the references it is clear that both primary authorities for the Ionian Shore hoard agree that it contained pegasi, although Vlasto reports "a few" as against Hirsch's "a great number;" I take Vlasto's phrase "Corinthian pegasi" to be a generic term not intended to exclude pegasi from Corinthian colonies. As against this the only authority for pegasi at Carosino is Newell's undated manuscript note derived from an unknown source; this is clearly the authority for Noe's information, for not only does it cover the same three Corinthian mints only, but out of its 25 coins, nine are in fact *fdc* examples of Leucas as Hirsch XXVI, 519. Neither Evans nor Vlasto mention Corinthian coins from Carosino, though admittedly neither was concerned with giving a formal list of the hoard's contents. More significant is the fact that the 76 coins from Carosino acquired by Quagliati for the Taranto Museum also contained no pegasi, for these because of their commonness usually reach museums, whereas rarer issues are quickly dispersed. The conclusion can hardly be avoided that Newell's note (to which the heading "Carosino Hoard, Corinthian" seems to have been added subsequently in pencil) is mistaken, and that there were in fact no pegasi in the Carosino hoard. As will appear latter, the particular pegasi listed by Newell are unlikely to have occurred in mint state in a hoard dated as late as 336–4 B.C.

What then is the source of Newell's pegasi? Can they have come from the Ionian Shore find? The coins listed are as follows:

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Corinth			
1–2. *palmette*	Ravel Series I/II[2]	cf. *BMC* 155	*Fdc*
3. *ivy leaf*	Ravel Series II		*Fdc*
4. *snake*	Ravel Series V	*BMC* 137	VF
5. *dolphin* and Σ	Ravel Series XIVa	*BMC* 386	*Fdc*
Ambracia			
6. *caduceus*	Ravel 43–53[3]		?
7–8. in field, MA	Ravel 95/6		worn
9. No symbol	?		worn
Leucas			
10. in field, Γ			VF
11. *sepia*		*BMC* 33	?
12. *foot*		*BMC* 35	?
13–14. *wreath*		*BMC* 38	*Fdc*
15–16. *palmette*		*BMC* 39	*Fdc*
17–25. *vine*		*BMC* 43	*Fdc*

In addition the ANS has a photograph of a coin from the Camman collection also said to be from Carosino:

26. *lizard*			*Fdc*

Noe has drawn attention to Hirsch Cat. XXVI (May 23, 1910), and a glance at plates XVI and XVII reveals an obvious correspondence in both types and condition with many of the coins in Newell's list; this correspondence can be summarized as follows:

	Newell	Hirsch XXVI
Corinth	3. *Fdc*	515 *Fdc*
	4. (*snake*) VF	507 (*trident* but this symbol is die-linked to the snake). "Vorzüglich"
	5. *Fdc*	514 *Fdc*
Leucas	15–16. *Fdc*	526 *Fdc*
	17–25. *Fdc*	519 *Fdc*
	26. *Fdc*	525 *Fdc*

[2] O. E. Ravel, *Les Poulains de Corinthe*, II (London, 1948), pp. 142 ff.
[3] O. E. Ravel, *The "Colts" of Ambracia*, *NNM* 37 (New York, 1928).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In addition Hirsch XXVI, 524 ("Vorzüglich") with shell symbol, though not represented in Newell's list, belongs to the same group of issues of Leucas as his nos. 11–25. Finally it should be noted that Leucas nos. 11–26 form a closely knit group of issues linked not only by common obverse dies but by the regular use of ΛΕΥ on reverse. But Corinthian hoards are not uncommon and the similarity of types and condition is not in itself enough to prove a common provenance for the two lots, still less to connect them with the Ionian Shore hoard.

There is, however, a good deal of evidence for connecting other parts of Hirsch XXVI with the Ionian Shore find. This evidence can be stated as follows:

1. In the first letter quoted in the Appendix Hirsch says that he bought the hoard in 1908 or 1909 (Vlasto, "1908").
2. Assuming the date to be 1908, sale XXVI (May 1910) was the first sale in which coins from the Ionian Shore find could be included, because sales XXII (1908) – XXV (1909) were devoted to collections which did not cover South Italy.
3. Hirsch quotes coins in Cat. XXVI from Taras (no. 176), Thurium (no. 289), Metapontum (nos. 232, 274), Croton (no. 324) and Terina (no. 355) as being from this hoard; these correspond with the mints listed by Vlasto as being in the Ionian Shore Hoard.
4. In his copy of Hirsch XXVI in the Ashmolean Museum, Evans noted as being from the "Hirsch find" Thurium nos. 281, 285–91, 294, 296; Hirsch had also referred to "289 following" as from this find.
5. Vlasto reported "very many staters [of Corcyra] absolutely fdc . . . as Hirsch XXIX Sale, 1910, 381–384." Hirsch in the second letter reproduced in the Appendix confirms that there were about 100; Evans in his copy of Hirsch XXVI noted no. 496 as from the "Hirsch find."

There is thus ample evidence that Hirsch XXVI contained parts of the Ionian Shore find; that catalogue contained a group of pegasi in outstanding condiction, which is very similar to the group listed by Newell. Now it might still be argued that finds of pegasi are not

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

uncommon, and that these groups might well come from some other source, if not from the Carosino hoard of 1904, parts of which were certainly still being dispersed in 1910. In fact, the Carosino hoard can be excluded on grounds of date. It was buried ca. 335, and various Sicilian finds reveal the range of pegasi circulating at this date;[4] these include the early issues of Ravel's Period V at Corinth, as well as a considerable range of Period IV issues, though no longer in really fresh condition. The uncirculated pegasi in Hirsch XXVI and in Newell's list, far from belonging to the end of Period IV, are drawn from its earlier issues;[5] they cannot reasonably be associated with a hoard buried ca. 335.

Hoards containing pegasi terminating in Period V are common particularly in Sicily, whereas similar hoards of an earlier date are very rare indeed. This is a further reason for associating this hoard group of uncirculated early Period IV pegasi with the Ionian Shore find of ca. 360 B.C., which is known to have contained pegasi. But perhaps the most compelling reason for associating Newell's and Hirsch's pegasi with the Ionian Shore hoard is the marked predominance of the mint of Leucas among these pegasi, for this hoard contained another very large group of uncirculated silver from Western Greece, from Corcyra, and there is little doubt that both together formed a single consignment.

The conclusion that the Ionian Shore hoard contained at least 25 mint state pegasi of Corinth and Leucas, together with about 100 staters of Corcyra in equally fine condition provides an indication for the chronology of the fourth century coinages of Corinth and Leucas, and to a lesser extent for that of Corcyra; such evidence has hitherto been hard to find. Ravel dated his Period IV from 415 to 387, and Period V from 386–307, this final date being decisively

[4] E.g., Licata, Centuripe, Nissoria; see G. K. Jenkins, "A Note on Corinthian Coins in the West," *ANSCent.Publ.*, pp. 367–379.

[5] The sequence of the issues of Leucas has not yet been determined in detail, but it is clear that the issues here in question belong to the earlier part of the fourth century, certainly not later than 380–360 B.C. The Corinthian issues represented are among the earlier issues of Period IV; the early date of at least part of Series XIV is supported by the presence of another example in the Vito Superiore hoard buried ca. 387 B.C. (G. Procopio, "Tesoretto monetale di Vito Superiore," *Rendiconti Acc. Arch. di Napoli* XXVII [1953], p. 14, no. 129).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

confirmed by the Chiliomodi hoard.[6] Jenkins, however, has shown on the evidence of Sicilian hoards that Period V cannot have started before the middle of the century;[7] and there is reason to suppose that nearly all the issues of Period III had been struck before 430. Thus for the period between ca. 430 and 350 the coins of Corinth and Leucas in the Ionian Shore find provide almost the only evidence for chronology in terms of better dated issues from other mints; this group is especially valuable because it is consistent, relatively numerous, and in very fine condition.

The Corinthian and Leucadian pegasi under discussion cannot on grounds of date belong to the Carosino hoard, but they also raise the question whether the Ionian Shore hoard can be as late as 360 B.C., the date proposed by Vlasto. The pegasi of Leucas have not yet been the subject of a detailed monograph, but the group in question can hardly be as late as the decade 370/60, and if the hoard was really buried ca. 360, their condition precludes an earlier date. These issues at Leucas certainly come within a very few obverse dies after the abandonment of the square-headed reverse die, and this is a change which took place at Corinth either already in the fifth century or in the early fourth; a date 390/80 for these Leucadian issues would be preferable to 370/60. Similarly for Corinth; though Ravel's sequence of issues in Period IV is not wholly reliable there can be no doubt that Series I, II and V represented in the Ionian Shore hoard are early in the period, and the early date of at least part of Series XIV is guaranteed by the specimen in the Vito Superiore hoard;[8] here too a date of issue in the period 390/80 would be preferable to 370/60.

At Taras Period III is a long one, extending on Evans' chronology 380–345, but of 18 types recorded by Evans only four (A, B, C and K) are represented in the Ionian Shore hoard; we may conclude that these cover only the first few years of this period. The only other comparable hoard terminating in this period seems to be Taranto 1916, in which types A, C, H, K, L, O, P and Q were present.[9]

[6] O. E. Ravel, "Corinthian Hoard from Chiliomodi," *Transactions of the International Numismatic Congress* (London, 1936), pp. 98–108.
[7] Jenkins, *ANSCent. Publ.*, pp. 372 ff.
[8] See note 5 above.
[9] L. Breglia, "Due tesoretti di monete greche della Magna Grecia," *Mem. R. Accad. di Arch. di Napoli*, VI (1939), pp. 5–76.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

We may conclude that if the Ionian Shore hoard was buried ca. 375/70, it could well have contained a consignment of uncirculated coins of Corcyra, Leucas and Corinth of the period 385/80 B.C.

APPENDIX

1. Letter from Jacob Hirsch to S. P. Noe, Sept. 19, 1920.

Dear Mr. Noe,

I have been too busy for finishing the catalogue work that I only today find a moment to answer your different questions. Hope you and Mr. Newell have received finally also the plaster casts which I ordered in Munich to be forwarded to Mr. Newell's address. I think the find you refer to is the one I bought in Italy in summer 1908 or 1909? Containing a great number of pegasi, Tarentine didrachms as in my catalogues No. XXVI n. 176, also Thurium C. XXVI. 289 following. Metapontum as no. 232.274 of the same catalogue. Crotone as n. 324 etc. Terina as 355. I cannot see exactly if they are other pieces of that find in some of my catalogues; I sold most of the pieces very quick to my clients, without passing them in my sales. I think I have preserved in Munich some of the finest pieces in plaster casts and have written to look them up. If they can find them, I shall have the greatest pleasure in sending them to you. I gave some impressions of Metaponte coins in my possession to Mr. Newell, hope you got them. I shall send you some more as soon as I have an answer from Munich, about the above mentioned plaster casts ....

Very truly,
Yours,
Dr. Jacob Hirsch

2. Letter from Jacob Hirsch to S. P. Noe, July 1, 1922.

Dear Mr. Noe,

Your favour of June 13th has been forwarded to me. The Corcyra pieces have been found together with the famous Tarentum, Terina, Metapontion Didrachmes, if I don't make a mistake it was 1908? I had about one hundred pieces at the time.

With best regards.

Yours very truly,
Dr. Jacob Hirsch

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE SELEUCID MINT AT ANTIOCHIA ON THE PERSIAN GULF

(PLATES II–V)

OTTO MORKHOLM

In a paper published in 1965 I first pointed to the existence of a Seleucid mint in the East, producing coins from the time of Antiochus IV (175–164 B.C.) down to the first reign of Demetrius II (146–139 B.C.).[1] The mint was presumably located at the confluence of the Tigris and Euphrates rivers into the Persian Gulf, in the area known under the Seleucids as the "District of the Erythrean Sea." As my publication is not easily available to numismatists and as some important material has recently appeared, I have decided to republish the whole series and give my arguments for the attribution in greater detail.

THE COINS[2]

ANTIOCHUS IV (175–164 B.C.)

Obv.: Diademed bust of king r., above front, star of eight rays; irregular border.

Rev.: Apollo seated l. on omphalus, holding arrow in r. hand, l. hand resting on bow; above, star of eight rays; at r., ΒΑΣΙΛΕΩΣ; at l., ΑΝΤΙΟΧΟΥ; in outer l. field, ΑΡ; in outer r. field, ΑΡ.

Tetradrachms

A1 – P1. ↗ 17.00 gr. ANS. (ex P. Lederer Coll.). *BMzB* 9 (1929) p. 523, pl. 118, 1 = Le Rider, *Suse*, p. 62, pl. IV, J. (PLATE II,1)

[1] *Acta Arch* 36 (1965), pp. 152–156. See further Georges Le Rider, "Un atélier monétaire séleucide dans la province de la Mer Érythrée," *RN* 1965, pp. 36–43, where all the literary references are discussed.

[2] The dies have been numbered separately for each king, A1, etc. denoting obverse or anvil dies of the tetradrachms, P1, etc. their reverse or punch dies. The same system, but with lower case a and p, is used for the drachm series of Antiochus IV. Georges Le Rider, *Suse sous les Séleucides et les Parthes* (Paris 1965) is cited as *Suse*.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A2 – P1. ↑ 16.80 gr. Arthur Houghton III Coll., N.Y. (Found in Iran) (PLATE II,2)

Obv.: Diademed bust of king r.; above front, star of six rays; fillet border.

Rev.: Type and inscription as before, but no star above Apollo's head; in outer l. field, 𐤀𐤐; in outer r. field, 𐤁𐤐.

Tetradrachms

A3 – P2. ↗ 17.01 gr. Arthur Houghton III Coll., N.Y. (ex Susa 1959 hoard). *Acta Arch* 1965, p. 134, no. 42.

A3 – P3. ↗ 16.99 gr. Copenhagen. (ex Susa 1959 hoard). *Acta Arch* 1965, p. 134, no. 43 = Le Rider, *Suse*, p. 62, pl. V, A. *Rev.* monogram in outer r. field off flan. (PLATE II, 3)

Obv.: Radiate and diademed head of king r.; irregular border.

Rev.: Same type and inscription; in l. field, 𐤍𐤐; in exergue, 𐤑 (?)

Tetradrachm

A4 – P4. ↑ 16.79 gr. ANS (acq. 1966). (PLATE II, 4)

Obv.: Radiate and diademed head of king r.; fillet border.

Rev.: Same type and inscription; various monograms.

Drachms

a1 – p1. ↖ 3.94 gr. ANS. Le Rider, *Suse*, p. 329, no. 17a, pl. LXIII, 28. *Rev.* in outer l. field, 𐤀𐤐 above, Σ. Pierced. (PLATE II, 5)

a2 – p2. ↑ 4.21 gr. Stockholm. *Dr. Otto Smith's Münzensammlung*, p. 24, no. 317 = Naville X (1925) no. 1034 = Le Rider, *Suse*, p. 329, no. 17b, pl. LXIII, 29. *Rev.* in outer l. field, 𐤀𐤐; in exergue, Σ. (PLATE II, 6)

a3 – p3. 3.94 gr. Naville X (1925) no. 1035 = Le Rider, *Suse*, p. 329, no. 17c, pl. LXIV, l. *Rev.* same monograms as preceding. (PLATE II, 7)

a4 – p4. ↖ 4.11 gr. Copenhagen (acq. 1961). *Rev.* same monograms as preceding; in exergue, traces of erased monogram; in inner l. field, traces of erased monogram 𐤇 (?). (PLATE II, 8)

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

a5 – p5. ↖ 4.02 gr. Ashmolean Museum, Oxford. *Rev.* in exergue, Σ (?). (PLATE II, 9)

a5 – p6. ↖ 4.2 gr. Leningrad. *JIAN* 13 (1911), p. 151, no. 341. *Rev.* in outer l. field, ΔΡ.

a6 – p7. ↗ 4.11 gr. ANS. Le Rider, *Suse*, p. 329, no. 17d, pl. LXIV, 2. *Rev.* in outer l. field, Δ; exergue off flan. (PLATE II, 10)

a7 – p8. ↗ 4.22 gr. Berlin. Imhoof-Blumer, *Monnaies grecques*, p. 430, no. 67 = Le Rider, *Suse*, p. 329, no. 17e, pl. LXIV, 3. *Rev.* in outer l. field, Δ.

a8 – p9. ↑ 4.01 gr. London. *BMCSeleucid*, p. 34, no. 7, pl. XI, 5 = Le Rider, *Suse*, p. 329, no. 17f, pl. LXIV, 4. *Rev.* in outer l. field, Δ. (PLATE II, 11)

a8 – p10. ↑ 4.04 gr. ANS. Le Rider, *Suse*, p. 329, no. 17g. *Rev.* in outer l. field, □; exergue off flan. (Found in Persia ca. 1932—Noe, *Bibliography of Greek Coin Hoards*², no. 810)

a9 – p11. ↑ 4.00 gr. Aberdeen, Newnham-Davis Coll. *SNG* 397. *Rev.* no monograms.

Obv.: Diademed head of king r.; irregular border.
Rev.: Same type and inscription; in outer l. field, ΔΡ; in outer r. field, Σ.

Tetradrachms

A5 – P5. ↑ 17.04 gr. Glasgow. MacDonald, *Hunterian Coll.* III, p. 41, no. 1 = *Acta Arch* 1965, p. 153, pl. III, A. (PLATE III, 1)

A5 – P5. ↗ 16.96 gr. Copenhagen. Gerhard Hirsch LIII, June 1967, no. 3236.

Obv.: Diademed head of king r.; fillet border.
Rev.: Similar to preceding.

Tetradrachm

A6 – P6. ← 15.31 gr. ANS. *Acta Arch* 1965, p. 153, pl. III, B. (PLATE III, 2)

Obv.: Diademed head of king r.; fillet border.
Rev.: Same type and inscription; in outer l. field, ΡΛ; in outer r. field, ⊠.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Tetradrachm

A7 – P7. 16.79 gr. Münz. u. Med. XXXVII, Dec. 1968, no. 243 (ex Susa 1959 hoard) = *Acta Arch* 1965, p. 134, no. 44. (PLATE III, 3)

ANTIOCHUS V (164–162 B.C.)

Obv.: Diademed head of king r.; dotted border.

Rev.: Apollo seated l. on omphalus, holding arrow in r. hand, l. hand resting on bow; at r., ΒΑΣΙΛΕΩΣ; at l., ΑΝΤΙΟΧΟΥ; in exergue, [Ε]ΥΠΑΤΟ[ΡΟΣ]; in outer l. field, Σ ; in outer r. field, traces of letter or monogram (?).

Tetradrachm

A1 – P1. ↑ 15.99 gr. Copenhagen, *SNG* 227 = *Acta Arch* 1965, pl. III, D. (PLATE III, 4)

DEMETRIUS I (162–150 B.C.)

Obv.: Diademed head of king r.; no border.

Rev.: Apollo seated l. on omphalus, holding arrow in r. hand, l. hand resting on bow; at r., ΒΑΣΙΛΕΩΣ; at l., ΔΗΜΗΤΡΙΟΥ; in outer l. field, Ϡ ; in outer r. field, Ε .

Tetradrachm

A1 – P1. ↑ 16.90 gr. ANS. Naville X (1925), no. 1065 = *Acta Arch* 1965, p. 153, pl. III, C. (PLATE III, 5)

Obv.: Diademed head of king r.; fillet border.

Rev.: Same type and inscription; in exergue, ⊬ ; in outer r. field, ϟ.

Tetradrachms

A2 – P2. ↖ 16.65 gr. Berlin. Imhoof-Blumer, *Monnaies grecques*, p. 431, no. 82 = *Acta Arch* 1965, p. 154, pl. IV, A.

A2 – P2. ↑ 16.57 gr. ANS. (acq. 1968) (PLATE III, 6)

Obv.: As preceding.

Rev.: Same type and inscription; in outer l. field, ⊬ ; in outer r. field, Μ (? partly off flan).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Tetradrachm

A2 – P3. ↗ 16.62 gr. Paris. *Rois de Syrie*, no. 707 = *Acta Arch* 1965, p. 154, pl. IV, B. (PLATE IV, 1)

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. field, ; in outer r. field, .

Tetradrachms

A3 – P4. ↑ 16.60 gr. Paris. *Rois de Syrie*, no. 706 = *Acta Arch* 1965, p. 154, *h*.

A3 – P4. ↑ 16.57 gr. The Hague, Six Foundation. Imhoof-Blumer, *Monnaies grecques*, p. 431, no. 82a = *Acta Arch* 1965, p. 154, pl. IV, C. (PLATE IV, 2)

A3 – P4. ↗ 16.95 gr. London. *BMCSeleucid*, p. 45, no. 1 = *Acta Arch* 1965, p. 154, *i*.

A3 – P4. ↑ 16.67 gr. Sweden (private collection). Naville X (1925), no. 1064 = *Acta Arch* 1965, p. 154, *k*.

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. field, ; in outer r. field, .

Tetradrachms

A4 – P5. ↖ 16.04 gr. ANS. *Acta Arch* 1965, p. 154, *l*. (PLATE IV, 3)

A4 – P5. ↑ 16.56 gr. Berlin. Imhoof-Blumer, *Monnaies grecques*, p. 431, no. 81 = *Acta Arch* 1965, p. 154, *m*.

A4 – P5. ↑ 16.93 gr. H. Seyrig Coll. Hess/Leu, April 1957, no. 293 = *Coll. Jameson* I, no. 1703 = *Acta Arch* 1965, p. 154, *n*.

A4 – P5. Iran (private collection) (ex Susa 1959 hoard). *Acta Arch* 1965, p. 139, no. 75.

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. field, ; in outer r. field, .

Tetradrachm

A5 – P6. ↑ 16.80 gr. Copenhagen (acq. 1968). (PLATE IV, 4)

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. field, Μ ; in outer r. field, 𐤀 .

Tetradrachms

A6 – P7. ↗ 16.95 gr. Copenhagen (ex Susa 1959 hoard). *Acta Arch* 1965, p. 139, no. 76 = Le Rider, *Suse*, p. 200, pl. LXXIV, 25. (PLATE IV, 5)
↑ 16.59 gr. Susa 1965 hoard. *RN* 1966, p. 117, no. 77.

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. field, 𐤀 (?); in outer r. field, Μ (?).

Tetradrachm

A7 – P8. ↖ 16.32 gr. A. Spaer Coll., Jerusalem (ex Susa 1959 hoard). *Acta Arch* 1965, p. 139, 77, pl. V. (PLATE IV, 6)

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. and r. fields, uncertain monograms.

Tetradrachm

A8 – P9. ↑ 16.65 gr. A. Houghton III Coll., N.Y. (ex Susa 1965 hoard). *RN* 1966, p. 117, no. 76, pl. VII. (PLATE V, 1)

ALEXANDER BALAS (150–145 B.C.)

Obv.: Diademed head of king r.; fillet border.
Rev.: Apollo seated l. on omphalus, holding arrow in r. hand, l. hand resting on bow; at r., ΒΑΣΙΛΕΩΣ; at l., ΑΛΕΞΑΝΔΡΟΥ; in outer l. field, 𐤋 (?); in outer r. field, 𐤓 (?).

Tetradrachm

A1 – P1. ↑ 16.73 gr. Paris (ex Susa hoard no. 5). Le Rider, *Susc*, p. 199, no. 492, pl. XLVIII. (PLATE V, 2)

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. and r. fields, uncertain monograms.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Tetradrachm

A2 – P2. ↖ 16.73 gr. Copenhagen (ex Susa 1959 hoard). *Acta Arch* 1965, p. 142, no. 113, pl. VI = Le Rider, *Suse*, pl. LXXIV, 26. (PLATE V, 3)

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. field, Φ ; in outer r. field, AP.

Tetradrachms

A3 – P3. ↑ 16.61 gr. Copenhagen (ex Susa 1959 hoard). *Acta Arch* 1965, p. 142, no. 112, pl. V. (PLATE V, 4)

A3 – P3. 15.95 gr. Teheran (ex Susa hoard no. 5). Le Rider, *Suse*, p. 200, no. 493, pl. XLVIII.

A3 – P3. ↑ 16.64 gr. A. Houghton III Coll., N.Y. (ex Susa 1965 hoard). *RN* 1966, p. 118, no. 100, pl. VIII.

Obv.: As preceding.
Rev.: Same type and inscription; in outer l. field, Δ (?); in outer r. field, HP .

Tetradrachm

A4 – P4. ↑ 16.85 gr. Paris (acq. 1968 from Iran). (PLATE V, 5)

DEMETRIUS II, 1ST REIGN (146–139 B.C.)

Obv.: Diademed head of king r.; fillet border.
Rev.: Apollo seated l. on omphalus, holding arrow in r. hand, l. hand resting on bow; at r., ΒΑΣΙΛΕΩΣ; at l., ΔΗΜΗΤΡΙΟΥ; in outer l. field, M; in outer r. field, HP .

Tetradrachms

A1 – P1. 16.55 gr. Münz. u. Med. XXXVII, Dec. 1968, no. 252. (PLATE V, 6)

A1 – P1. ↑ 15.87 gr. Paris (ex Susa hoard no. 5). Le Rider, *Suse*, p. 199, no. 491, pl. XLVII = *Acta Arch* 1965, pl. VI, B.

Obv.: Same die as preceding.
Rev.: Same type and inscription; in outer l. field, Ψ ; in exergue, AI .

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Tetradrachms

A1 – P2. ↑ 16.83 gr. Paris (ex Susa 1959 hoard). *Acta Arch* 1965, p. 142, no. 118, pl. VI = Le Rider, *Suse*, p. 200, pl. LXXIV, 24. (PLATE V, 7)

A1 – P2. ↑ 16.05 gr. Teheran (ex Susa hoard no. 5). Le Rider, *Suse*, p. 199, no. 490, pl. XLVII.

A1 – P2. Iran (private collection) (ex Susa 1959 hoard). *Acta Arch* 1965, p. 142, no. 119.

That the coins were struck somewhere in the eastern part of the Seleucid empire is obvious at once from their style and provenance. Their stylistic and technical peculiarities will be dealt with below; here it suffices to say that the evidence of provenance alone is quite decisive. It has frequently been pointed out that Hellenistic silver coins of the Attic standard moved freely within the former empire of Alexander the Great with the exception of Egypt and its dependencies. While this observation is generally true, it does not apply to the eastern Seleucid issues of the period after the death of Antiochus III (187 B.C.). From this date onward, the eastern issues tended to remain within the general area of their production. Many of them were virtually unknown until quite recently, with the publication of the important material from the Susa excavation, and the emergence of Iran as a regular source of supply for the international coin market.[3] All of the coins of known provenance have come from Iran, and a large proportion of the tetradrachms, 17 specimens of a total of 38, derives from three important hoards found at or near Susa.[4]

Several stylistic and technical details reveal the unity of the coins listed here. I shall consider these points below, and by means of comparisons with the well-known silver issues of Seleucia-on-the-Tigris, Susa, and Ecbatana I shall try to demonstrate that our coins form a distinctive series and were in fact minted at a separate eastern mint.

Die position. With the exception of a single tetradrachm of Antiochus IV (A6 – P6 in New York) all the coins listed above were

[3] *Acta Arch* 1965, pp. 146–147.

[4] *Suse*, hoard no. 5, pp. 246–248; *Acta Arch* 1965, pp. 127–156; A. A. Houghton and Georges Le Rider, "Un trésor de monnaies hellénistiques trouvé près de Suse," *RN* 1966, pp. 111–127.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

struck from dies that were adjusted in an upright position. There are a fair number of slight deviations (↖, ↗) indicating that the dies were not mechanically fixed but adjusted manually. From the careful study of Le Rider we know that, as far as the silver coins are concerned, the contemporary issues of Seleucia-on-the-Tigris were adjusted in the same upright position, while the coins from Susa and Ecbatana were not adjusted at all.[5]

Obverse border. The tetradrachm of Antiochus V has on the obverse a dotted border. On some obverse dies of Antiochus IV (A1, A2, A4, A5) the border is described as irregular. Generally these frames show a certain alternation of larger and smaller elements, thus indicating that a fillet border was intended. From Demetrius I the border consists invariably of the fillet introduced by Antiochus III at the beginning of his reign at some western mints.[6] At Seleucia-on-the-Tigris the dotted border was used until the beginning of Antiochus IV's reign; then the fillet border made its appearance and was used until about the middle of Alexander Balas' reign, when the dotted border reappeared. Demetrius II again used the fillet border on his issues, except for the very first.[7] At Susa the fillet border is used continuously from the time of Seleucus IV to the latest Seleucid issues.[8] During the period here under consideration Ecbatana used the fillet border for her issues of tetradrachms, while the very extensive series of drachms issued by Antiochus IV and Demetrius I show the dotted border and the fillet border used indiscriminately.[9]

The portrait heads. The generally eastern style of the portraits was recognized long ago. Le Rider, attributing Antiochus IV A1 – P1 (New York) and A3 – P3 (Copenhagen) to Susa, found a stylistic similarity between these portraits and heads from Susa, and this comparison undoubtedly is valid.[10] On the other hand, some of the

[5] *Suse*, pp. 20–23.
[6] E. T. Newell, *Western Seleucid Mints* (New York, 1941), p. 68 (Nisibis), pp. 138–139 (Antioch).
[7] *Suse*, pl. XXIV–XXX. For the first issue of Demetrius II from Seleucia see *RN* 1966, p. 119, no. 114, pl. VIII.
[8] *Suse*, pls. IV–VIII.
[9] *Suse*, pls. LXII–LXVII.
[10] *Suse*, pp. 62–63. The eastern origin of the coins known to them was already apparent to F. Imhoof-Blumer, *Monnaies grecques* (1883), p. 432, and P. Lederer, *BMzB* 9 (1929), p. 525.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

portraits of Demetrius I seem to me to be closer in style to the issues of Seleucia-on-the-Tigris.

A particularly good case is illustrated on Plate IV (compare no. 4 with A). Here the similarity is in my opinion so close that we must consider the possibility that the same die-cutter worked both at Seleucia and at our mint.

Reverse type. The retention of the old Seleucid Apollo reverse at this period must be regarded as an eastern trait. The mints of Ecbatana and Susa show the same conservatism, while Seleucia-on-the-Tigris, more exposed to western influences, retained the Apollo type only until the beginning of the reign of Demetrius I. Except for a single issue of Demetrius II from the very beginning of his reign,[11] the later coins showed the new western reverse types, a seated Tyche for Demetrius I and II, and a seated Zeus for Alexander Balas.[12]

Reverse border. Without exception, our coins have no border encircling the reverse type. At Seleucia-on-the-Tigris the silver coins show a dotted border on the reverse down to and including the reign of Demetrius I, after which it disappears. The issues from Susa are practically all provided with a dotted reverse border down to the very end of the Seleucid coinage.[13] At the mint of Ecbatana the situation is a little more complicated. On the coins of Seleucus IV and Antiochus IV no reverse border is visible. Under Demetrius I most of the tetradrachms show no reverse frame, but there are a few exceptions,[14] where a dotted border appears. On his drachms the dotted border and the lack of a border seem to occur with almost equal frequency.

Honorific titles. The reverse inscriptions of our coins consist of the royal title and the personal name of the king. Again the tetradrachm of Antiochus V is exceptional in the addition of the epithet ΕΥΠΑΤΟΡΟΣ. The use of various honorific titles on the coin inscriptions was introduced by Antiochus IV about 173/2 B.C. at the mint of Antioch-on-the-Orontes and spread from there to other western

[11] *RN* 1966, p. 119, no. 114, pl. VIII.
[12] *Suse*, pls. XXVII–XXX.
[13] For illustrations of the material see notes 7–8 above.
[14] *Suse* pl. LXVI, 4, and *RN* 1966, p. 117, no. 66, pl. VI.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

mints.[15] In the east the mint of Seleucia-on-the-Tigris added no epithets on the silver coinage of Antiochus IV, but seems to have experimented for a short time with the inscription on its bronzes.[16] Under Demetrius I, the title of "Saviour," ΣΩΤΗΡΟΣ, was constantly used on the gold and silver, and the use of honorific titles continued under Alexander Balas and Demetrius II.[17] At Ecbatana honorific epithets were already added to the legends on the large silver coins under Antiochus IV and were continued under Timarchus, Demetrius I and Alexander Balas, while nearly all the drachms of Antiochus IV and some drachms of Demetrius I show the short form of the title.[18] Only at Susa do we find a complete absence of honorific titles on the silver coinage, similar to the procedure at our mint.

Moneyers' marks. The coins here under discussion were generally signed by two moneyers who placed their monograms or initials in the right and left fields or in the left field and the exergue. A quite similar system of control was used at Susa, while Seleucia-on-the-Tigris generally has only one mint magistrate signing the issue or none at all.[19] Under Demetrius I, when two monograms are sometimes found on its coins, one of them is often placed on the obverse.[20] The tetradrachms of Ecbatana are in most cases distinguished by the horse's head symbol and one monogram or initial.[21]

The characteristics enumerated above show beyond doubt that our coins originated in the east. Some of them point more specifically to a connection between our series and the issues from Susa and Seleucia-on-the-Tigris. This applies to the general style of the

[15] Otto Mørkholm, *Studies in the Coinage of Antiochus IV of Syria* (Copenhagen, 1963), pp. 68–74.

[16] *Suse*, pp. 139–140, no. 306. It is important to note that the use of honorific titles introduced on some bronze issues of Antiochus IV was abandoned later in the same reign.

[17] *Suse*, pp. 141–153. On the bronze issues of Demetrius I and Alexander Balas the short title is generally preferred.

[18] *Suse*, pp. 328–340.

[19] No monograms: *Suse*, pl. XXIX, 314, 1–2 and M (Alexander Balas); *RN* 1966, p. 119, no. 114, pl. VIII (Demetrius II).

[20] E.g. *Suse*, pl. XXVII, S; XXVIII, A. The only tetradrachm of Seleucia with two monograms placed in the same way as on our coins is *Suse*, pl. XXVIII, B, here illustrated on Plate IV, A.

[21] Besides the material listed in *Suse*, pp. 328–340, see now *RN* 1966, p. 114, nos. 19–21; p. 117, no. 66.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

portraits, while the continuation of the Apollo reverse, the absence of honorific titles, and the use and disposition of two moneyers' monograms connect our coins with the products of the Susa mint. However, the use of dies adjusted in the upright position links the series under discussion with the issues from Seleucia-on-the-Tigris, and the absence of any reverse border throughout the series is a distinctive feature which is unparalleled at the other eastern mints. This survey, then, leads to the conclusion that the coins listed above form a separate series issued at an eastern mint with a location that allowed strong influences from Seleucia-on-the-Tigris and Susa.

At this point some of the individual coins may be discussed briefly. I have placed some rather unusual coins of Antiochus IV at the beginning of the list of coins. A1 to A3 of this king all show a star above the portrait bust on the obverse, while on A4 and on the drachms a1 to a9 the king's head is adorned with a radiate crown. The reason for this arrangement is that the following coins of Antiochus IV, of the normal type, appear to be linked by their style and by similar monograms to the succeeding issues of Antiochus V and Demetrius I. As we know from the western issues of Antiochus IV, the star and the radiate crown, symbols of the ruler's celestial and divine nature, were not used at the beginning of his reign, but appeared about 173/2 B.C. at the earliest.[22] We thus must assume that our eastern mint started its production some years after the accession of Antiochus IV, perhaps about 170 B.C. In this connection it is, of course, important that we know of no eastern coins of Antiochus III and Seleucus IV which can with any probability be connected with our series. Apparently a quite new mint was established by Antiochus IV somewhere in the east.

In some respects, such as the dotted obverse border and the addition of ΕΥΠΑΤΟΡΟΣ to the title, the coin of Antiochus V is different from the rest of the series. However, the monogram in the left field seems to be a variant of some monograms found on the late issues of Antiochus IV (P5 and P6) and the first issue of Demetrius I (P1). The style of the head also favors its attribution to our mint. A detail, the way in which one of the loose ends of the diadem is

[22] Mørkholm, *Studies in the Coinage of Antiochus IV of Syria*, pp. 20 and 46–47.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

carried forward and is visible in front of the neck, may be significant because a similar arrangement of the diadem ends is found on A1 and A2 of Demetrius I.

The first coin of Demetrius I (A1 – P1) also deserves commentary, because the portrait is so unlike all other representations of that king. In fact, the head of this coin is much more similar to the portraits of Antiochus IV, and I have suggested earlier that an old die of Antiochus IV may have been reused at the beginning of Demetrius I's reign, when his portrait was not yet known in the east.[23] However, another explanation is perhaps, preferable. It may be that the die-cutter, faced with the task of producing an obverse die for the first issue of Demetrius I without knowing what the king looked like, had to make the best of a difficult situation and produced a portrait closely related to his own former works, which therefore showed greater similarity to the deceased Antiochus IV than to the reigning king.[24]

A new and most important addition to our material is the last coin of Alexander Balas, now in Paris (A4 – P4), because it provides definite information on the end of the series. The obverse die is identical with the die A1 of Demetrius II, and it is quite obvious that the die was more worn when used under the later king. It has been a matter of discussion whether the coins here ascribed to Demetrius II were actually struck by this king or should be attributed to Demetrius I,[25] but with the appearance of the Paris specimen, it is certain that our mint produced Seleucid coins down into the reign of Demetrius II. In all probability it stopped at the same time as Seleucia-on-the-Tigris and for the same reason—the Parthian conquest of the eastern Seleucid satrapies which reached Mesopotamia in 141 B.C.[26]

So far we have established that our coins are eastern, that they form a distinctive series running from about 170 to 141 B.C., and that they show influences from Seleucia-on-the-Tigris and, to an even greater degree, from Susa. I have argued on an earlier occasion that these premises, joined to the well-known fact that in the eastern part

[23] *Acta Arch* 1965, p. 153.
[24] Cf. *Acta Arch* 1965, p. 149.
[25] *Suse*, p. 199, nos. 490–491, ascribed to Demetrius I, mint of Nisibis. *Acta Arch* 1965, p. 154.
[26] *Suse*, pp. 361–363.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of the Seleucid empire each satrapy generally had one, and only one mint, point to a location of our mint in the "District of the Erythrean Sea" and presumably in its capital, best known under its later name, Charax Spasinou,[27] which was given to it by Hyspaosines, king of Characene, during the 120's B.C. According to a passage in Pliny's *Natural History* this city was founded by Alexander the Great under the name of Alexandria and later, having been destroyed by floods, was rebuilt as Antiochia by a King Antiochus who is presumably to be identified with Antiochus IV.[28] If this holds true, it is tempting to connect the rather unusual appearance of celestial attributes, star and radiate crown, on the first coins of Antiochus IV with his position as *ktistes*, or founder of the city. The opening of a mint here at this time may be explained as a measure intended to revive and stimulate trade along the important sea route between India and the district at the mouth of the great Mesopotamian rivers.[29]

I am well aware that the attribution here suggested rests on circumstantial evidence. It is especially to be regretted that no bronze coins can be connected with any degree of plausibility to our silver series.[30] However, it is my conviction that the elimination of other possible mint locations carries great weight in this case. As far as I can see, we might expect the issues of a mint situated in northern Mesopotamia or along the middle course of the Euphrates (the district called Parapotamia which may have formed an independent satrapy) to have a more western appearance than our series.[31] The district of Persis presumably became independent of the Seleucid kingdom sometime before 150 B.C., when a new series of silver coins was issued by the local dynasts.[32] Thus the "District of the Erythrean Sea," with its capital Antiochia, where influences from Seleucia-on-the-Tigris and Susa would naturally converge, remains virtually the only possibility.

[27] *Acta Arch* 1965, p. 156.
[28] Pliny, *Historia Naturalis*, VI.138–139. Cf. Mørkholm, *Antiochus IV of Syria* (Copenhagen, 1966), pp. 167–169.
[29] For the interest of Antiochus IV in this trade route see *Suse*, pp. 309–311.
[30] See *RN* 1965, pp. 41–43.
[31] The municipal issues of Antiochus IV from Edessa and Nisibis are definitely western in appearance. Moreover, I think that tetradrachms of Demetrius I such as *Suse*, p. 215, no. 572. pl. XLVII, and *RN* 1966, p. 118, nos. 84–87, may be attributed to Mesopotamia, presumably to the mint of Nisibis.
[32] Cf. *BMCArabia, Mesopotomia, Persia*, pp. clxx ff.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A BITHYNIAN HOARD OF THE FIRST CENTURY B.C.[1]

(PLATES VI–XV)

PHYLLIS POLLAK

In the collection of the American Numismatic Society are thirty-two tetradrachms and twenty-two casts of tetradrachms from a hoard allegedly found in Bithynia in Turkey.[2] The hoard appeared on the Istanbul market in the summer of 1928. During the next few years, Edward T. Newell purchased the coins and gathered the casts from several different sources.[3] Although it is not certain that the fifty-four specimens represent the entire hoard, it can be assumed that they are representative of it and that nothing essential is missing. The coins can be divided into four groups: royal issues of the Kingdoms of Pontus and Bithynia; civic issues of Heracleia Pontica and Byzantium.

MITHRADATES VI OF PONTUS

Obv.: Diademed head of king with light beard r.
Rev.: ΒΑΣΙΛΕΩΣ ΜΙΘΡΑΔΑΤΟΥ ΕΥΠΑΤΟΡΟΣ. Drinking Pegasus l.; in l. field, star and crescent. All in wreathed border.

Tetradrachm

111–96/5 B.C.

1.[4] 16.69 *Rev.* to r., 𐤌 .

[1] The present article is the result of a project begun during the 1968 Summer Seminar of the American Numismatic Society. I would like to thank Miss Margaret Thompson for her patience and guidance without which the pursuit and completion of this study would have been impossible. Mrs. Hyla A. Troxell has read the manuscript and made helpful suggestions for which I am grateful.
[2] Noe 153.
[3] There are discrepancies between Newell's list of the hoard and the actual specimens found in the trays of the American Numismatic Society: of the Pontic series, one coin on Newell's list is missing and two (4 and 7) are not listed, though they are mentioned; of the Bithynian series, seven coins on Newell's list are missing and one cast (28) is not listed; of the Lysimachi series, four coins on Newell's list are missing and one coin (48) is not listed.
[4] The die axes of all the coins are in the twelve o'clock position.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv.: Diademed and beardless head of king r.

Rev.: ΒΑΣΙΛΕΩΣ ΜΙΘΡΑΔΑΤΟΥ ΕΥΠΑΤΟΡΟΣ. Drinking stag l.; in l. field, star and crescent. All in wreathed border.

Tetradrachms

85/4 B.C.

2. 16.66 *Rev.* to r., ΓΙΣ (year 213) and ; below, ΙΑ (month eleven). Naville XV, 851.

80/79 B.C.

3. *Rev.* to r., ΗΙΣ (year 218) and ; below, ΙΒ (month twelve).

76/5 B.C.

4. 16.79 *Rev.* to l., ; to r., ΒΚΣ (year 222) and ; below, Ε (month five).
Naville XIV, 294.

5. 16.80 *Rev.* to l., ; to r., ΒΚΣ (year 222) and ; below, Ε (month five).
Naville XV, 853.

6. 16.84 Same obverse and reverse dies as no. 5.
Naville XV, 854.

7. 16.95 *Rev.* to l., ; to r., ΒΚΣ (year 222) and ; below, Ϲ (month six).
Naville XIV, 293.

8. 16.79 *Rev.* to l., ; to r., ΒΚΣ (year 222) and ; below, Ζ (month seven).

9. Same obverse and reverse dies as no. 8.

10. 16.83 Same obverse die as nos. 8–9. *Rev.* to l., ; to r., ΒΚΣ (year 222) and ; below, Ζ (month seven).
Naville XV, 855.

11. 16.74 Same obverse die as nos. 8–10. *Rev.* to l., ; to r., ΒΚΣ (year 222) and ; below, Ζ (month seven).
Naville XV, 856.

12. 16.67 *Rev.* to l., ; to r., ΒΚΣ (year 222) and ; below, Η (month eight).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

13. 16.79 *Rev.* to l., ; to r., BKΣ (year 222) and ; below, H (month eight).
14. *Rev.* to l., ; to r., BKΣ (year 222) and ; below, Θ (month nine). Naville XV, 852.
15. *Rev.* to l., ; to r., BKΣ (year 222) and ; below, AI (month eleven).

Coin no. 1 belongs to the earlier part of Mithradates' reign, between the time he took the kingship from his regent mother about 111 B.C. and the time he began to mint dated coins in 96/5 B.C. The portrait of the king shows a young man with a light beard and an arrangement of the hair which is relatively subdued by comparison with the representations on later coins. The Pegasus of the reverse probably refers to the dynastic claim of descent from the hero Perseus,[5] for according to the legends Pegasus was born from the dying Medusa when Perseus cut off her head. This is not the first reference to Perseus on Pontic coinage; around the middle of the second century B.C., Mithradates IV, the grandfather of Mithradates VI, used a standing Perseus as his reverse type.[6] The star and crescent in the left field appear on all royal Pontic issues from the time of Mithradates III, who first struck portrait coins. It symbolizes the Persian ancestry of the family and signifies its religious leanings.[7] The wreath of ivy leaves and blossoms with its Dionysiac connotation is appropriate for a king who adopted the epithet of Dionysos.[8]

On later coins the portrait of the king is idealized. He is cleanly shaven and has flowing locks. The drinking stag of the reverse is perhaps related to a small stag or deer which accompanies the male divinity of the coins of Mithradates' great-uncle Pharnaces I. The coins now have two monograms, presumably referring to moneyers with different functions for the one in the left field changes less frequently than that in the right field. The date is placed in the right field and is retrograde; below the inscription is a letter indicating the month of emission.

[5] E. T. Newell, *Royal Greek Portrait Coins* (Racine, Wisconsin, 1937), p. 48.
[6] Th. Reinach, "Rois de Pont," *RN* 1888, pp. 251f., pl. XVI, 5.
[7] Newell, *RGPC*, p. 47.
[8] Several sources indicate that Mithradates used this epithet: Cic., *Flac.* 60; App., *Mith.* 10; Ath. V. 212d; Plut., *Quaest. conv.* I.6.2.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

NICOMEDES III OF BITHYNIA

Obv.: Diademed head of Nicomedes II r.
Rev.: ΒΑΣΙΛΕΩΣ ΕΠΙΦΑΝΟΥΣ ΝΙΚΟΜΗΔΟΥ. Zeus standing l., left arm on scepter, crowning king's name; in l. field, eagle on thunderbolt.

Tetradrachms

115/4 B.C.

16. 16.84 *Rev.* to l., ΓΠΡ (year 183) and ⚘.

111/10 B.C.

17. *Rev.* to l., ΖΠΡ (year 187) and ⚘.

106/5 B.C.

18. 16.49 *Rev.* to l., ΒϘΡ (year 192) and ⚘.

102/1 B.C.

19. 16.76 *Rev.* to l., ΔϘΡ (year 196) and ⚘.

98/7 B.C.

20. 16.81 *Rev.* to l., Σ (year 200) and ⚘.

95/4 B.C.

21. 16.74 *Rev.* to l., ΓΣ (year 203) and ⚘.

NICOMEDES IV OF BITHYNIA

Same types as those of Nicomedes III

93/2 B.C.

22. 16.90 *Rev.* to l., ΕΣ (year 205) and ⚘.

92/1 B.C.

23. 16.83 *Rev.* to l., ΔΣ (year 206) and ⚘.
24. 16.21 *Rev.* to l., ΔΣ (year 206) and ⚘.

91/90 B.C.

25. 16.61 *Rev.* to l., ΖΣ (year 207) and ⚘.
26. 16.78 *Rev.* to l., ΖΣ (year 207) and ⚘.
27. 16.99 *Rev.* to l., ΖΣ (year 207) and ⚘.
28. 15.76 *Rev.* to l., ΖΣ (year 207) and ⚘.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

90/89 B.C.

29. 17.03 *Rev.* to l., HΣ (year 208) and ⋈ .
30. 17.21 *Rev.* to l., HΣ (year 208) and ⋈ .

89/8 B.C.

31. 16.85 *Rev.* to l., ΘΣ (year 209) and ⋈.

86/5 B.C.

32. 14.05 *Rev.* to l., BIΣ (year 212) and ⋈ .

84/3 B.C.

33. 15.05 *Obv.* behind head, Γ. *Rev.* to l., ΔIΣ (year 214) and ⋈ .

83/2 B.C.

34. 15.12 *Rev.* to l., EIΣ (year 215) and ⋈; to r., B.
35. 14.51 Probably same obverse die as no. 34. *Rev.* to l., EIΣ (year 215) and ⋈; to r., B.
36. 15.85 *Rev.* to l., EIΣ (year 215) and ⋈; to r., B.
Naville XV, 901.
37. 15.69 *Rev.* to l., EIΣ (year 215) and ⋈; to r., B.
Naville XV, 902.

The hoard has twenty-two coins issued by the last two kings of Bithynia, Nicomedes III Euergetes[9] and Nicomedes IV Philapator. Both used types employed by their predecessor Nicomedes II, so that all of their coins carry both the portrait and the legend of the earlier Nicomedes. The figure of Zeus placed on the reverse has been identified as a close copy of a statue of Zeus Stratios, which stood in the temple of Zeus in Nicomedia. This was the work of Doedalsos, a Bithynian sculptor of the middle of the third century B.C.[10] Prusias I, whose reign began in 228 B.C., adopted the Zeus statue as his coin type, with a thunderbolt and monograms in the left field. Prusias II added an eagle above the thunderbolt, probably in order to distinguish his coins from those of his father,[11] while Prusias' son, Nico-

[9] The epigraphical evidence for the existence of Nicomedes III Euergetes is discussed by Th. Reinach, "Un Nouveau Roi de Bithynie," *RN* 1897, pp. 241–260.

[10] Newell, *RGPC*, pp. 44–45; J. A. Overbeck, *Griechische Kunstmythologie* (Leipzig, 1871) pp. 60–61 and his *Geschichte der Griechischen Plastik* (Leipzig, 1894) p. 264.

[11] Th. Reinach, "Rois de Bithynie," *RN* 1887, p. 234.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

modes II, began the practice of dating the issues. The latest coins from this hoard (coins 33–37) show two unusual features; a small letter or mark just behind the head on the obverse and a large B behind the figure of Zeus on the reverse.

HERACLEIA PONTICA (Posthumous Lysimachus)

Obv.: Head of Alexander with ram's head and diadem r.

Rev.: ΒΑΣΙΛΕΩΣ ΛΥΣΙΜΑΧΟΥ. Seated Athena l., with left arm resting on shield and right hand holding winged Nike who crowns king's name; in l. field, club; below Athena's seat, ΗΡ ; in exergue, ΜΗ ΜΕ.

Tetradrachm

38. 16.60.

BYZANTIUM (Posthumous Lysimachi)

Obv.: Head of Alexander with ram's head r.

Rev.: ΒΑΣΙΛΕΩΣ ΛΥΣΙΜΑΧΟΥ. Seated Athena l., with left arm resting on shield and right hand holding winged Nike who crowns king's name; below Athena's seat, ΒΥ; in exergue, trident decorated with dolphins.

Tetradrachms

39. 16.57 to l., ΔΡ .
40. 16.57 to l., ΠΠ.
41. 15.72 to l., ΧΕ .
42. 15.80 to l., Κ .
43. 16.46 to l., ΠΡ .
44. 14.05 to l., ΠΠ .
45. 15.31 to l., Δ .
46. 16.33 to l., Ρ .
47. 15.62 to l., ΒΙ .
48. 15.59 to l., ΒΙ .
49. 14.36 to l., ΔΕ .
50. 15.72 to l., ΔΕ .
51. 14.97 to l., ΒΙ .
52. 14.61 to l., ΒΙ .
53. 15.62 to l., ΒΙ .
54. 15.78 to l., ΒΙ .

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In determining the burial date of the hoard, we are fortunate in having a number of dated issues. Both Pontus and Bithynia placed the years of local eras on their tetradrachms although both were slow in adopting the practice. Nicomedes II of Bithynia started with the year 149 and Mithradates VI of Pontus with the year 202. The best evidence for relating these dates to those of our own era is based on two coins[12] issued by the Bosporan Kingdom, a kingdom so closely associated with Pontus that it is assumed the same era was used. One coin has the portrait of Trajan and the other the portrait of Hadrian. Both, however, are dated to the year 413, indicating that they must have been struck in A.D. 117 when the change in rule took place. If the Pontic year began in October by analogy with other Asiatic years,[13] the era started in October 297 B.C.

The beginning of the Bithynian Era rests on other but less conclusive evidence. The earliest and latest dated coins from Bithynia belong to the years 149 and 224 of that era. One can assume that this seventy-six year period corresponds to the seventy-six years between the first year of the reign of Nicomedes II, 149 B.C., and the year the kingdom was bequeathed to Rome, 74 B.C. Both of these dates are known from literary sources.[14] The problem then becomes one of adjusting the Bithynian calendar, since the Bithynian year begins in October rather than January. The last year of the Bithynian Era, year 224, may have ended in October 74 B.C. or begun at that date. In other words the Bithynian Era may have begun in October 298 or 297 B.C. Either of these dates could refer to the time when Zipoetes, a local dynast, adopted the title of king of Bithynia.[15]

The later date, 297 B.C., is preferable for several reasons. First it is likely that Mithradates, who began to date his coins over fifty years after Nicomedes, simply adopted the era used by the more economi-

[12] J. Eckhel, *Doctrina Numorum Veterum*, 2 (Leipzig, 1794) pp. 381–382.
[13] W. H. Waddington, *Recueil Général des Monnaies Grecques D'Asie Mineure*, 2 (Paris, 1908) p. 217.
[14] Nicomedes II took the throne in 149 B.C. (Zonar. IX.465D). Nicomedes IV was dead by 74 B.C. (Eutropius VI.6).
[15] In ancient sources Zipoetes is referred to both as ἄρχων (Memnon 10) and Βασιλεύς (Diod. XIX.60), an indication that he used both titles during his lifetime.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

cally developed Bithynia,[16] especially since there is no evidence that 297 was a significant year for Pontus.[17] Even so, it is difficult to explain why Mithradates copied the Bithynian Era in 96/95 B.C. when he was on very bad terms with that kingdom. His motive may have been an attempt to undermine or rival Bithynia, or it may have been merely a matter of convenience. Secondly, the distribution of the extant coins from Bithynia indicates a decline for the years 210 through 213 of that era.[18] This decline would correspond to the years Nicomedes was in exile and Mithradates in control of Bithynia—Spring, 88–84 B.C. The fact that Bithynian coins were minted at all during this period must be attributed to the activities of cities which were not controlled by Mithradates and which remained loyal to Nicomedes.[19] Finally, there appears to be a gap in the production of Bithynian coins of the years 216–222 of that era; at least, no coins of those years are known. If the Bithynian Era did, in fact, begin one year before the Pontic Era, we could expect some Bithynian coins dated 223 in this hoard for there are twelve examples of Pontic coins dated 222. But there are no Bithynian coins of that date, a further indication that the two eras were synchronized.

[16] This theory was first suggested by Th. Reinach, *Trois royaumes de L'Asie Mineure* (Paris, 1888) p. 133 and upheld by William H. Bennett, "The Death of Sertorius and the Coin" *Historia* 10 (1961) p. 461.

[17] D. Magie, *Roman Rule in Asia Minor* (Princeton, 1950) p. 1087, n. 35. suggests that 297 is too early and concludes that Mithradates I took the royal title in 281 B.C.

[18] Bennett's chart (*Historia* 10 [1961]), is here reproduced with the addition of examples from this hoard.

Frequency Distribution of Bithynian Coins

Number of Coins	15	9	5	1	2	1	9
Bithynian Era	208	209	210	211	212	213	214
Oct. 297 (B.C. date)	90/89	89/8	88/7	87/6	86/5	85/4	84/3
Oct. 298 (B.C. date)	91/0	90/89	89/8	88/7	87/6	86/5	85/4

Although it is dangerous to draw conclusions from the number of surviving coins alone, there seems to have been a true decrease of production during these years. I have been able to examine photographs of over half the coins in the chart and have found only two die links: one between reverses of the year 208 and one between obverses of 214. There are at least seven dies in 209, and six in 214, more than the number of actual coins extant for any of the intervening years, thus substantiating the decline.

[19] Waddington, *Monnaies Grecques*, 2, p. 218.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Once we accept October 297 as the beginning of both the Pontic and Bithynian Eras, we can date the burial of the hoard with great accuracy. Of the twenty-two Bithynian tetradrachms, seven are the output of years between 115/4 and 93/2 B.C. Thereafter the coins are more concentrated, except for the gap during Nicomedes' exile. The series ends in the year 215 of the Bithynian Era (83/2 B.C.) with four examples, two of which are probably from the same obverse die (coins 34 and 35). Twelve of the fourteen dated Pontic coins were issued in different months of the year 222 of the Pontic Era (76/5 B.C.). Two pairs of these are duplicates, having the same obverse and reverse dies (coins 5 and 6; 8 and 9), and four others are linked by obverse dies (coins 10 and 11 have the same obverse die as coins 8 and 9; 12 and 13 share the same obverse die). This extremely high proportion of die-linked coins and the excellent state of preservation of these Pontic coins indicate a burial date very shortly after the date of issue of the latest coin, the eleventh month of the Pontic year 222. Therefore, the autumn of 75 B.C. would be a likely date for the burial; in fact the absence of Bithynian and Pontic coins of year 223 may indicate that the hoard was already out of circulation before October of 75 B.C.

Our sources give no specific event in the history of Bithynia which would account for the burial of the hoard at this particular time. The explanation may lie in a personal tragedy or in the troubled nature of the times. Nicomedes had not issued coins between 82/1 and 76/5 B.C. and was only able to produce small issues in the two years preceeding his death (75/4 and 74/3 B.C.). Mithradates was preparing to invade Bithynia again,[20] which he did in the spring of 73 B.C., and further abroad there was general economic depression in the province of Asia.

A burial date of 75 B.C. provides new evidence for dating the latest issues of the posthumous Lysimachi of Byzantium.[21] Henri

[20] The output of Pontic coinage was very large at this time. Gaius Cotta, Consul in 75 B.C., is reported to have told the Roman people of the dangers of Mithradates' great power (Sall., *Hist.* II.47.6. Maur.).

[21] These have recently been assigned to the beginning of the Christian era (H. Seyrig, "Monnaies Hellénistiques de Byzance et de Calcedoine," *Essays in Greek Coinage Presented to Stanley Robinson* [Oxford, 1968] pp. 198–200), or to the late 60's of the first century B.C. (M. Jessop Price, "Mithradates VI Eupator, Dionysus, and the Coinages of the Black Sea," *NC* 1968, pp. 9–10).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Seyrig has established criteria for the chronology of this series, based on the changes which occur on the reverses: at first the leg of Athena's chair is spiraled, later it is not; the monogram changes from ΠΥ to a small BY to a large BY; at first the trident is not present, then it is plain and later it is adorned with dolphins.[22] All the coins in our hoard belong to Seyrig's latest group, dated after 195 B.C., when a large BY fills the entire space below the chair and the trident is ornamented. M. Price[23] has recently divided Seyrig's latest group into four chronological sub-groups based on stylistic changes in the portrait. There are also changes on the reverses of the coins in this hoard which are chronologically significant. The shaft of the trident on coin 39, which belongs in Price's Series 2, terminates in a roundel. The shafts on all the later coins, 40–54, end with an arrow-like projection added to this roundel. On coins 39–46 the shield is decorated by rays, sometimes with a small squashed head in the center. On the latest coins, 47–54, which all belong in Price's Series 4, a large head surrounded by rays fills the center of the shield; the rays are still present but have become clearly secondary.

The dating of the coinage depends on hoard evidence.[24] Coins 39, 40, 41–46 and 47–54 make up four stylistic series arranged in chronological order. Coin 39 belongs to the same stylistic group, Price's Series 2, as three coins from a hoard found in Limani, Crete.[25] All the obverses have the same "small head in low relief, with decorative linear treatment of the hair."[26] Le Rider dates the coins from Crete between ca. 160 and ca. 110 B.C. because they are stylistically later than the three Byzantium Lysimachi with normal Hellenistic portraits, Price's Series 1, from the Babylon Hoard,

[22] H. Seyrig, op. cit. (see n. 21), pp. 183–200. A chart summarizing Seyrig's conclusions appears in his article, p. 199.
[23] *NC* 1968, pp. 9–10, pl. IV, 24–27.
[24] There are two hoards particularly important for the chronology. One, from Babylon, was buried ca. 155 B.C. and contains three Lysimachi of Byzantium, K. Regling, "Hellenistischer Münzschatz aus Babylon," *ZfN* 1929, pp. 92–132. The other, from Limani in Crete contains parallels for some of our coins. The main body of coins seems to have been withdrawn from circulation soon after 90 B.C., Georges Le Rider, *Monnaies crétoises du V^e au I^er siècle*, pp. 269–303.
[25] Le Rider, *Monnaies crétoises*, p. 278, nos. 87–89; pl. XLI, 5–7.
[26] *NC* 1968, p. 9.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

buried ca. 155 B.C., and earlier than the coins with flamboyant portraits, Price's Series 3, dated to the time of Mithradates VI. It was probably toward the end of this period, ca. 125–110 B.C., that our no. 39 was struck; in style it is far inferior to the three tetradrachms of the Babylon Hoard (see PLATE XII, A–C).

Coins 41–46 are paralleled by four coins in the Limani hoard[27] which belong to the earlier part of Mithradates' reign, ca. 110–85 B.C. All these coins are of Price's Series 3, distinguished by an obverse rendered in low relief in a "rather barbaric style, ... with flowing locks and seemingly a portrait of Mithradates."[28] Coin 40 is a transition piece between Price's Series 2 and 3, and is, therefore, to be dated ca. 110 B.C. The head is no longer small as in Series 2 and the hair tends toward the flamboyance of the portraits in Series 3. The trident ends with the arrow-like appendage found first on coins of Group 3. It seems likely that the single tetradrachm of Heracleia, no. 38, belongs to this same period.

Coins 47–54 belong to Price's Series 4 which is characterized by a deteriorated portrait with large bug-like eyes and wildly elaborate hair. Formerly, coins of this style were dated to the late 60's of the first century B.C. or very early in the first century A.D. because some of them were countermarked by Claudius.[29]

[27] Le Rider, *Monnaies crétoises*, p. 278, nos. 90–93, pl. XLI, 8–11. There is some difficulty in dating the Limani hoard. The latest coin is a tetradrachm of Mithradates VI, struck in 75 B.C. and hoarded ca. 70 B.C. on the basis of its light wear. All the other dated coins appear to have been taken out of circulation earlier, sometime between 90 and 80 B.C. Le Rider suggests that the Pontic piece was a later addition to an already existing hoard. Price does not accept this suggestion but believes the undated Byzantium coins are as late as the Pontic tetradrachm. Therefore, he dates the end of his Series 3, which depends on the Limani hoard for its chronology, to the mid 70's, a position untenable in light of the evidence of the Bithynian hoard, which clearly indicates that coins of Price's Series 4 were already being produced before 75 B.C. A date between 90 and 80 B.C. would be the best terminal for Series 3.

[28] *NC* 1968, p. 9.

[29] H. Seyrig, op. cit. (see n. 21), pp. 198f. For earlier discussion of these countermarks see Robert Mowat, "Les Tetradrachms de Lysimaque contremarques par Claude I," *NZ* 1911, pp. 237–242; Robert Mowat, "The Countermarks of Claudius I," *NC* 1909, pp. 10–18, pl. I.

Although the countermarks are generally found on tetradrachms of Series 4, there is one known example of a coin of Series 3 validated by Claudius (*NC* 1909, p. 10, n. 1).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

While these countermarks prove that the latest Lysimachi of Byzantium were still circulating in the time of Claudius, it does not rule out a much earlier date of emission. Numerous hoards testify to the continued use of coins minted centuries before their final burial; there is nothing surprising in the fact that issues of Byzantium struck in the first quarter of the first century B.C. were still in general circulation in the mid first century A.D. Certainly the evidence of the Bithynian Hoard indicates that the last series of Byzantine Lysimachi and the Mithradatic tetradrachms of 76/5 B.C., issues closely comparable in condition, were produced at roughly the same period.

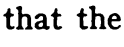
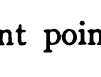
Can a more precise chronology for the Byzantine coinage be determined? Seyrig records five or six monograms for the coins of Price's Series 4,[30] four of these appear on specimens of the Bithynian Hoard. If they denote annual issues, emission may have been spread over a decade, but a limited period of intensive minting seems more likely. In his article on Mithradatic influence on the coinages of the Black Sea, Price suggests a relationship between the late Alexanders and Lysimachi of Mesembria, Odessus and Byzantium and the various expeditions of Mithradates against the Romans. According to his chronology, Series 3 at Byzantium was struck about the time of the second Mithradatic War and Series 4 may be connected with Mithradates' plans for an invasion of Italy in 63 B.C.[31] Both Series 3 and 4 must now be dated earlier than the periods to which Price assigns them, but the connection with the Mithradatic war effort seems valid. Series 3, reflecting supplementary support for the first Mithradatic War, would have been minted ca. 93–84 B.C. and Series 4, a coinage of the second Mithradatic War, ca. 76–73 B.C.

[30] H. Seyrig, op. cit. (see n. 21), p. 198, n. 3.
[31] M. J. Price, *NC* 1968, pp. 9–10.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

OBSERVATIONS ON THE BEHAVIOR OF TIBERIAN COUNTERSTAMPS

THEODORE V. BUTTREY, JR.

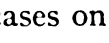
It used to be believed that the counterstamps which are found so frequently on Augustan and Tiberian *aes* coins served a solely economic function. They defined areas of circulation, established value in exchange, or guaranteed official issue. In 1946, however, Grünwald published his astonishing interpretation of the countermarks which appear for the most part on Augustus' moneyers' *asses*.[1] Working largely from the coins discovered at Vindonissa, he argued that the counterstamp legends,  , and the like, should be read as literally significant.[2] He also established an important point of relative chronology: when  , or overlap with on a single coin, is always the later. Developed in this way, his material revealed an unsuspected historical event. In or around the year 6 B.C., when we know Augustus and Tiberius to have fallen out, some sort of revolt on Tiberius' behalf appeared to have occurred in one or more of the army camps along the Rhine. The evidence is that Augustan coins were counterstamped with Tiberius' name—e.g., , , or . These might have been associated with the later reign of Tiberius, but Grünwald observed that frequently the name of Augustus was reasserted by the superimposition of another counterstamp, .

Grünwald's thesis, however imaginative, is impossible. The fatal flaw, as the reviewers have observed, is the occurrence of the counter-

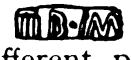
[1] Michael Grünwald, *Die Römischen Bronze- und Kupfermünzen mit Schlagmarken im Legionslager Vindonissa* (Basel, 1946).

[2] For convenience of reference the counterstamps are reproduced here as they appear in Colin Kraay, *Die Münzfunde von Vindonissa* (Basel, 1962).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

stamps in question on Augustan coins struck years later than 6 B.C., and even in a few cases on coins of Tiberius as emperor.[3]  is ambiguously general and could refer to almost any emperor. Actually it occurs under, as well as over, countermarks attributable to Tiberius and so must be assigned to his reign. The entire phenomenon is to be dated decades later than Grünwald believed.

Nonetheless, Grünwald developed a new approach to the vexed question of the meaning of the counterstamps, and if his solution is not possible it at least reminds us that a variety of approaches lies open to us. Subsequently Colin Kraay published two articles on the Vindonissa counterstamps elaborating another approach, the study of their behavior.[4] That is, before imagining areas of circulation or conflicts of political power, we should describe as fully as possible what the counterstamps *do*: on which coins they occur, in relation to which other counterstamps, at which sites and periods.

By this method one can show, for example, that the *Caesar* monogram counterstamp  was certainly a product of the lower Rhine camps. Its occurrence in site finds diminishes regularly as one moves from north to south, up river.[5] Similarly the Tiberian stamps noted above are most frequently found in the camps of upper Germany. Grünwald cited a piece from Vindonissa on which  had been superimposed on the  counterstamp, thus establishing a relative chronology of their application on that coin. On a second piece in Munich the reverse is true,  is applied over  .[6] Therefore the use of the two counterstamps, in different parts of the Rhine valley, must have been contemporary. Similarly, according to Kraay, " is

[3] Kraay, *Vindonissa*, p. 103, nos. 3225–3228. Cf. Konrad Kraft, "Zu den Schlagmarken des Tiberius und Germanicus," *JNG* 2 (1950–51), pp. 21–35.
[4] Colin Kraay, "Gegenstempel auf Münzen aus tiberischer Zeit in Vindonissa," in *Jahresbericht der Gesellschaft Pro Vindonissa*, 1954–55, pp. 55–66; and "The Behaviour of Early Imperial Countermarks," in *Essays in Roman Coinage presented to Harold Mattingly* (Oxford, 1956), pp. 113–136.
[5] Kraay, "Countermarks," p. 119.
[6] Kraay, "Countermarks," p. 119 and notes 1 and 2.

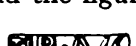
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

contemporary with  and  ; all four [i.e., including ] are thus early Tiberian."[7] The evidence is analogous to that which I have just cited for  and  : "the relative positions of the four stamps under discussion are interchangeable."[8]

On the basis of this evidence Kraay evolved a geographical theory of the counterstamps, in which clearly contemporaneous punches of distinct legend but roughly the same epigraphical content were applied at different camps. The numbers of pieces found at various sites suggest that  emanated from Vindonissa,  perhaps from Strassburg, and  from Mainz. Without revealing why the counterstamps were applied in the first place, this evidence indicates that a simple control was adopted to show where a given punch had been applied.

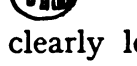
The difficulty is that the evidence from Vindonissa does not now support this argument. Kraay's articles preceded his catalogue of the Vindonissa finds,[9] so that they rely in great part on Grünwald's assessment of the find material rather than on Kraay's own subsequent classification. But some of the most important readings on which Kraay's articles relied are not supported by his own Vindonissa catalogue—the coins are simply not there, or are not to be read as Grünwald suggested. Kraay did not comment on the divergence; on the contrary, in his introduction to the catalogue, pp. 46–48, he repeated the position on contemporaneity taken earlier in his two articles, in spite of the fact that the catalogue does not support the argument. As things now stand, the Vindonissa catalogue has eliminated the doublets alleged by Grünwald (A over B, B over

[7] Kraay, "Countermarks," p. 119.

[8] Kraay, "Countermarks," p. 123, and the figure. Delete three arrows as not in the Vindonissa catalogue: 1) from  to  ; 2) from  to  ; 3) from  to  .

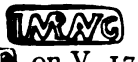
[9] See note 2 above.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A) which were earlier taken by Kraay to prove the contemporaneity of the major group of counterstamps. No such doublet occurs at Vindonissa at all;[10] there is, rather, a single, consistent line of relative chronology. Kraay's geographical theory need not be abandoned, but there is now no particular need for it. Perhaps it can be formulated differently. A variety of punches was used to apply these legends; Grünwald claims to have distinguished 5 punches with  , 4  , 4  and 4 .[11] These are the clearly legible and presumably official punches; more with the same legends are found retrograde or barbarized. It may be that this is the evidence for geographical spread: a given legend could have been produced at several camps simultaneously.

Kraay's readings of the counterstamps on the moneyers' *asses* found at Vindonissa are entirely consistent. The reliability of his result is emphasized in that he did not aim at it specifically. The punches are catalogued in alphabetical order, and as we have seen above, his introductory treatment of them actually runs counter to the catalogue. Since his readings are independent of his historical argument, they should be taken as binding until specific evidence to the contrary is discovered.

On the basis of the Vindonissa catalogue a relative chronology can be constructed for seven of the counterstamps which appear there on the Augustan moneyers' *asses*. Virtually the entire find of moneyers' *asses* is included, for one or more of these seven counterstamps is to be found on all but 38 of the 612 countermarked examples. The chronology is of course not demonstrable from each individual piece. Those which bear a single stamp tell us nothing; on those which bear two or even three the relative order of their

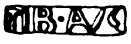
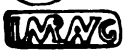
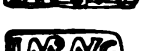
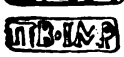
[10] There is one apparent exception:  under  on Vindonissa 992 and 1664, but over on V. 1719. However Kraay writes me (July 12, 1967) that the latter is a printer's error. The final P of should have been indicated as doubtful. Since was the second stamp to be applied, this is probably the common variety over (see below).

[11] Pp. 128–9.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

application is often not ascertainable.[12] But where relative chronology is ascertainable the results are totally consistent.

The relative chronology of these counterstamps is indicated in the following table. In the column at the left is the number of examples in which the second punch is superimposed to some degree upon the first. At the right is the number of examples without superimposition, in which wear or damage shows the priority of the counterstamp.

		Super-imposition shows priority	*Wear or damage shows priority*
1. 	occurs under 2. 	2	0
	under 3. 	3	0
	under 6. 	17	15
2. 	occurs under 3. 	2	0
	under 6. 	33	3
3. 	occurs under 4. 	1	0
	under 6. 	2	11
4. 	occurs under 6.	2	1
5. 	occurs under 6. 	1	0
6. 	occurs under 7. 	1	1
7. 			

The relative position of no. 5 is uncertain since we have only the one example of its counterstamping by no. 6.

The counterstamps on the moneyers' *asses* at Vindonissa establish their own relative chronology. There is no evidence for contemporaneity, although nos. 1–5 may well have been used within a brief

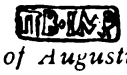
[12] The relative chronology of the counterstamps is demonstrable in three ways. Either one stamp is superimposed upon another, or struck upon the coin in such a way as to damage the other, most commonly by being impressed upon the opposite face ot the coin with such force as to flatten the earlier punch to some degree; or the first counterstamp has been worn in circulation.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

period. The absolute chronology is not in question here, but it can be noted that no. 2 occurs on *asses* of Tiberius struck in A.D. 22–23 (V. 3226, 3228), so that nos. 3–7 must be later. Even the *aes* of A.D. 22–23 probably did not reach Vindonissa until a decade or more after its production at Rome. Kraft has shown that the latest issue of moneyers' *asses* struck at Rome ca. 3 B.C. had not arrived in full flood at Oberhausen when that camp was abandoned ca. A.D. 15–17.[13] On the other hand our counterstamps must be Tiberian, since they can hardly be explained as Caligulan or later.[14] Kraay was inclined to date the countermarking as middle rather than late Tiberian.[15] The new arrangement of the countermarks, implying a longer term of activity, and the slowness with which Roman *aes* reached the Rhine, suggests rather the 30's A.D.

A second aspect of the behavior of the Tiberian countermarks seems to have gone unnoticed. It has been observed that a given punch-legend tends to fall on one face of the coin rather than the other, and some explanations have been offered for this phenomenon. For example there is the case of  , which falls almost exclusively on the obverse of the moneyers' *asses* but almost exclusively on the reverse of the Lugdunum Altar *asses*. Kraay took this behavior to be a function of the date of the counterstamp. Augustus was dead, so that the defacing of his portrait was permissible on the moneyers' *asses*, but Tiberius' features were discernible on some of the Lugdunum *asses*, so that for safety's sake the  punch was normally employed only on the reverse of this type.[15] The argument presumes a peculiar indifference to the divinity of the deceased Emperor on the part of an organ of the state in the face of the DIVVS AVGVSTVS coinages of Tiberius. It fails to explain why other counterstamps did not behave in the same way, nor for that matter the positive

[13] Konrad Kraft, "Das Enddatum des Legionslagers Haltern," in *Jb* 155–156 (1955–56), pp. 101–104.

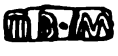
[14] Unless  be Caligulan as Grant claims (*The Six Main Aes Coinages of Augustus* [Edinburgh, 1953], p. 23 note 6). But one of his four references appears to be in error, while a second pertains only to Tiberius (cf. Kraay, "Countermarks," p. 134, note 5).

[15] Kraay, *Vindonissa*, p. 47.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

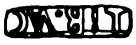
insistence of  in falling on the obverse of the moneyers' *asses*.

But most important, the gross sum of obverse or reverse appearances of a given countermark obscures the number of particular instances in which the coin involved already bore an earlier countermark. At least one of our series behaves very diversely in these instances.

	% *obv.*	% *rev.*	*Specimens*[16]
 without earlier counterstamp	40	60	138 (55+83)
 without earlier counterstamp	15	85	185 (27+158)
with earlier  on reverse	0	100	2 (0+2)
 without earlier counterstamps	96	4	67 (64+3)
 with earlier  on obverse	100	0	5 (5+0)
with earlier  on obverse	100	0	2 (2+0)
on reverse	0	100	1 (0+1)
 without earlier counterstamps	0	100	9 (0+9)
with earlier  on reverse	0	100	1 (0+1)

[16]  is omitted because its precise position in the series cannot be determined. Note that the number of specimens is for the coin in the given state within the chronological series of countermarks as established above. Thus, all examples of  are listed first, since the stamp was applied to uncountermarked coins. Some of the same examples are given again below as they are subsequently recounterstamped with ,  , or the others.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

 without earlier counterstamps	24	76	113 (27+86)
with earlier  on obverse	52	48	23 (12+11)
on reverse	8	92	25 (2+23)
with earlier  on obverse	81	19	16 (13+3)
on reverse	0	100	47 (0+47)
with earlier  on obverse	11	89	35 (4+31)
 and  on obverse	33	67	3 (1+2)
with earlier and  on obverse	0	100	1 (0+1)
on reverse	0	100	1 (0+1)
with earlier  on reverse	0	100	4 (0+4)

 may appear on either face of the coin, but the reverse predominates over the obverse. The punch was struck perhaps exclusively on *asses* thitherto uncounterstamped.[17]

 appears on the reverse in a very high proportion of the examples. Of 187 coins struck with the countermark, only two bear  as a second punch after an earlier  , in both cases on the reverse (V. 1087, 1313). (Since tends to fall on the reverse, the pairing with on the same face may be merely a coincidence.) Two explanations for the rarity of the collocation of the two punches are possible: either there was a deliberate attempt to avoid punching upon *asses* already counterstamped with , or the coins were taken at random from circulation, but the earlier countermark had been so little used that

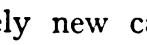
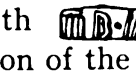
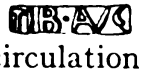
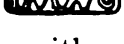
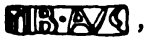
[17] The countermark is found at Vindonissa paired with one of two countermarks of lesser importance, but in each case the other punch is the later (V. 1085, 1720).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

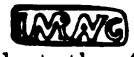
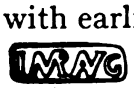
the proportion 185:2 represents the proportion of uncountermarked to countermarked moneyers' *asses* actually in circulation at the time  was used. It is argued below that the first alternative is almost certainly correct.

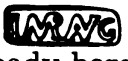
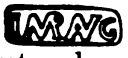
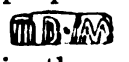
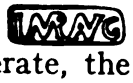
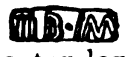
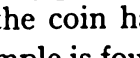
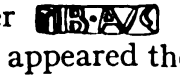
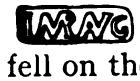
 is found less frequently than the first two counterstamps. It falls almost invariably upon the obverse. In eight instances  accompanies or even obliterates an earlier  or  , but usually on the obverse (one exception) where  was impressed in any case. Again the totals indicate that the large proportion of the coins upon which  was impressed bore no earlier counterstamp; and again one will have to choose in explanation between deliberate selection or the state of the circulation.

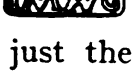
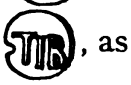
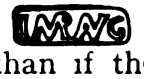
 occurs invariably on the reverse, in one case struck over  . (A single occurrence on the obverse of a late Augustan *as* struck for Tiberius is noted at Vindonissa, no. 1791.)

 presents an entirely new case. Contrary to all the counterstamps which precede it,  is more frequently found with earlier punches (155 examples above, plus a few not in this series) than on previously uncounterstamped *asses* (116 examples, of which 113 preserve a discernible obverse or reverse). In about one-third of the former cases the new stamp overlay some part of the older, but in the rest the  legend lay beyond the first punch or on the other face of the coin. There can hardly have been a serious attempt to obliterate the earlier punch.[18] Here we find the answer to the question posed above. If both  and  had been applied to such a small fraction of the *asses* in circulation that the succeeding stamp in each case had to be struck mostly upon uncounterstamped *asses*, how then can it be that  suddenly produces more *asses* with earlier punches than without?  , found on even fewer specimens than  or  , produced 64 *asses* without previous countermark, as against eight

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

with, a proportion of 89:11. Yet the  pieces abound in earlier countermarks. It can only be that the first three countermarks in this series, probably the first five, were deliberately applied to coins which had not already received a punch, although a few with earlier punches were mixed in all the same. But the behavior of  is entirely different, and one must conclude that it served a different function from the punches that went before.

There is another curiosity here. The behavior of  depends not simply on whether the coin to be punched already bore another countermark, but on what that countermark specifically was. Those responsible for the counterstamping must actually have read the earlier stamp and proceeded accordingly. Thus, on coins which bore no earlier stamp,  tends to fall on the reverse in the proportion 3:1. But when faced with *asses* previously marked  on the obverse the proportion changes to ca. 1:1; that is, there seems to be a tendency to place  on the obverse of the coin to accompany, if not to obliterate, the earlier stamp. If  originally fell on the reverse,  does as well, in a far larger proportion of cases than if the coin had never borne a counterstamp. An even more striking example is found with the coins bearing an earlier  counterstamp. When it fell on the obverse,  appeared there also in the great majority of cases; but if it fell on the reverse  joins it there 100% of the time (47 pieces).

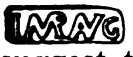
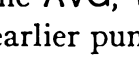
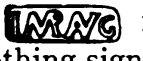
It is obvious that there was a strong inclination to pair  to these earlier countermarks. Yet the case of  is just the opposite.  seems deliberately to ignore it.  , as we have seen, fell almost exclusively upon the obverse of the moneyers' *asses*; yet on the same coins  is punched upon the reverse in proportions even larger than if the coin had borne no earlier countermark at all.

We may conclude that  ,  and  very likely communicated much the same information. That information

[18] For deliberate obliteration see Grünwald, p. 138, nos. 167–8.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

need not have had anything to do with the imperial name and titles; the varying legends might indicate simply varying conditions of issue. In any case a piece counterstamped with one of these three legends seems not to have needed a second of them. In this respect Kraay's geographical thesis is supported, though not the contemporaneity of counterstamping upon which his thesis is based. And yet there may have been a subtle distinction in the flavor of the three legends, even if not in their final purpose. Perhaps the original legend of the coins upon which they were struck dictated the position of the punches, e.g.,  tending to shun the obverse of the moneyers' *asses* as if to avoid a dittography of *Augustus*.

 , on the other hand, must signify something new. It is clearly placed so as to obliterate, confirm or amplify the earlier countermarks. It tends to occur on the same face as those punches which already included the elements IMP or AVG, but not with  alone. Perhaps then there was some concern that the ambiguity of  , which includes no clue as to the emperor's name, might suggest to the unwary that a coin bearing two punches had been countermarked by two emperors. To ensure that we read the two or three counterstamps together, and understand them as referring to just one IMP or one AVG, the  punch was applied on the same face as the earlier punch in 101 cases out 120, or 84%. That this was done with deliberate care, even if not with perfect consistency, is shown by the proportion. The same proportion applies for the *avoidance* of  by  : 31 cases out of 35, or 89%. In this case it seems to have been felt that  imparted a message which  might only confuse, or at least to which  had nothing significant to add.

We have yet to discover the most essential circumstances of the Tiberian countermarks: who used them, when, where and to what end. Nonetheless some details of their employment are now clearer. It has long been noted that the countermarks have been used in a limited way, on specific issues and specific denominations. The countermarks discussed above on the moneyers' *asses* do not fall to

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the same extent on the Lugdunum Altar *asses*, where quite different counterstamps are frequently found. The sesterces and dupondii of both series are by comparison seldom counterstamped, and in any case do not bear the punches which we have found so prominently on the *asses*. It is certain, then, that the punches were not applied indiscriminately to coins taken at random from circulation. Individual coins were actually read at the place of counterstamping, their denominations, types and legends guiding the application of the punches. More surprising, the previous punches were read as well. For there is otherwise no explaining the behavior of  vis-à-vis the earlier counterstamps. We are not dealing with a simply economic phenomenon in the counterstamping, although it may have had economic implications or even purposes. But the punch was more than a symbol; it bore a legend meant to be understood in its own terms. The result of this investigation is, curiously, to support Grünwald after all, not his historical thesis, for the chronology will not allow it, but his methodological conception. It really must be true that the counterstamps were meant to be understood in themselves, whatever their ultimate purpose.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

FIVE BYZANTINE NOTES

(PLATES XVI–XXI)

GEORGE E. BATES

The Notes are organized under the following headings:

1. A Supplement to "The Antiochene Copper of Justinian"
2. A Maurice Pentanummium from Cyzicus
3. The Antioch Mint under Heraclius
4. The Third Officina at Seleucia
5. An Addition to the 30 Nummi Coinage

1. A SUPPLEMENT TO "THE ANTIOCHENE COPPER OF JUSTINIAN"

This four-part note will supplement in minor respects Professor Bellinger's analysis of the copper coinage of Justinian I as presented in the Dumbarton Oaks catalogue and an article in *ANSMN*.[1] Coins from my collection to which reference is made are described at the end of the Note.

(a) *Class B*. In the D.O. catalogue (p. 141) the mint mark of Class B and of coin no. 216a (p. 143) is given as ϹΗЄЧPO. The footnote references for no. 216a are to Wroth no. 288, Tolstoi no. 256, and Ratto no. 654. Wroth gives his no. 288, however, as having the mint mark C̄HЄЧP°. Tolstoi records the mint mark of his no. 256 as C̄HЄЧPO. Ratto's no. 654 does have the mint mark printed as ϹΗЄЧPO, but cites as references Wroth no. 288, Tolstoi no. 256, and Sabatier no. 46.[2] A close examination of *D.O.Cat.* I, no. 216a (pl. XXXVII) shows that the mint mark is probably C̄HЄЧP°, not ϹΗЄЧPO.

[1] A. R. Bellinger, *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection*, I (1966), pp. 141–156; and "Byzantine Notes," *ANSMN* 12 (1966), pp. 93–96, "The Antiochene Copper of Justinian." Although a few comments on specific coins were included in the catalogue, major discussion was reserved for the above cited article and a second series of "Byzantine Notes" in *ANSMN* 13 (1967). Some of those Notes presumably were written before the catalogue was put in final form.

[2] Sabatier no. 46, however, is of regnal year 26 (see his pl. XIV, 5), not 16; and the ϹΗЧΠ mint mark is of Class D, not Class B.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The catalogue also lists under Class B with mint mark ϹHЄЧPO three folles not in the Dumbarton Oaks or Whittemore collections. Two of these were Wroth nos. 289 and 290 to which Wroth gave the mint marks CH̄ЄЧPᵒ and C̄H̄ЄЧPᵒ, respectively. The third was Tolstoi no. 258 for which Tolstoi recorded the mint mark as C̄H̄ЄЧPO.[3] In further support of the mint mark C̄H̄ЄЧPᵒ there are five folles of Class B in my collection with this mint mark, and none with ϹHЄЧPO (nos. 1–5).

On the basis of his observations of the mint marks, Bellinger came to the following conclusions in his note (p. 95):

> The follis mark of Class B, ϹHЄЧPO abandons the Greek of Class A [ΘȲPO] to return to the Latin letters. The T now appears as ϲ, a cursive form ... It was continued at Antioch as long as the mint continued to operate. On the half-follis it has become C̄H̄, apparently because of confusion with the mark of abbreviation on the preceding class [ΘV̄]. The decanummium repeats the follis.

However, the new evidence cited above suggests rather that:

(1) the mark of Class B was not ϹHЄЧPO but C̄H̄ЄЧPᵒ; (2) the decanummium did repeat the follis, but with the mark C̄H̄ЄЧPᵒ, not ϹHЄЧPO;[4] (3) if there was confusion with the mark on Class A, it occurred on all denominations of Class B, not merely on the half-follis; (4) the T did not become ϲ but C; and (5) the form ϲ did not continue thereafter, for Class C has the form Ч, and it was only beginning with Class D that the form became τ (not ϲ) and was subsequently continued.

(b) *Classes C and D.* In the catalogue and Note referring to these Classes there are several minor inconsistencies and omissions which can be corrected, and an overlap that may be removed by ending Class C in regnal year 550/1 and beginning Class D in 551/2.

[3] *D.O.Cat.* I omitted the date and officina, Є, in its description of this coin.
[4] The only decanummium of Class B described in *D.O.Cat.* I was Ratto no. 681 with mint mark printed as ϹHЄЧP but which the illustration on pl. XVI shows to be C̄H̄ЄЧPᵒ. Ratto makes reference to Sabatier no. 105 for which a mint mark CHЄЧP is printed but which on pl. XVI, 22, is shown as CH̄ЄЧP.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In dating the period in which folles of Class C were struck to 546/7–548/9, Wroth no. 296, of the year 549/50, was presumably overlooked. There is also a follis of this class and date in my collection (no. 6). Furthermore, *D.O.Cat.* I, no. 220 of the year 549/50, on which the first letter of the mint mark is somewhat obscure, is probably of Class C rather than D.[5] Consequently, the dating of Class C folles should be extended to 546/7–549/50, and the dating of Class D folles should begin in 551/2.

In both the catalogue (p. 141) and Note (p. 94) the period of the Class C half-folles was given as 546/7–552/3. Inadvertently, *D.O.Cat.* I, no. (244), which cited *Antioch*, no. 2106 for the year 553/4, was overlooked. A half-follis of the year 554/5 in my collection (no. 7) will extend the known period of striking Class C half-folles to 546/7–554/5. Although Bellinger labels Class D as "missing" for the half-folles (Note, p. 94), the mint mark ΔΓ was applicable to both Classes C and D, and consequently these classes merge in the case of the half-folles.

The catalogue (p. 141) gives the period of Class C decanummia as 548/9–549/50, while the Note (p. 94) gives 546/7–549/50. The latter obviously includes *D.O.Cat.* I, no. 252 of 546/7 which was not included in the catalogue summary on p. 141. There was a gap in the 546/7–549/50 sequence, however, for the year 547/8. A previously unpublished decanummium in my collection supplies this missing year (no. 8). Since *D.O.Cat.* I, no. 254, the decanummium of 549/50, lacked a legible mint mark and does not appear to have been published elsewhere, its attribution to Class C is confirmed by two decanummia in my collection of that class and date (nos. 9 and 10). Finally, *D.O.Cat.* I, no. 255, a decanummium of the year 550/1 which is given to Class D, appears from the illustration on D.O. pl. XL to belong to Class C. The footnote references for this coin are to Wroth no. 327, Tolstoi no. 433, and Ratto no. 682, all three of which are of Class C.[6] Shifting this coin, as well as the *D.O.Cat.* I, no. 220 follis,

[5] The footnote reference for this coin is to Wroth no. 296 and Tolstoi no. 266 (which latter is merely a reference to Wroth no. 296). Wroth gave the mint mark of his no. 296 as ЧНЧΔΓ, so that it would have been of Class C.

[6] Wroth gives the mark as ЧНЧΠΓ and this is confirmed on pl. IX, 5. Tolstoi also gives the mark as ЧНЧΠΓ, and pl. 25 confirms his reading. Ratto gives the mark as ЧНЧΠΓ, also, and his pl. XVII confirms it.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

from Class D to Class C removes the overlap in dates of the two classes. Class C thus ends in 550/1 and Class D begins in 551/2.

(c) *Classes E and F*. The Note (p. 94) is correct in dating the first example of Class F folles with mint mark ϚHЄЧP to the year 559/60,[7] but the catalogue (p. 141) starts this class with the year 561/2 and places the ϚHЄЧP follis, *D.O.Cat.* I, no. 229b.2 in Class E, a class which had the mark given as ϚHЧℙ (p. 147). *D.O.Cat.* I, no. 229b.2 and two folles of Class E (*D.O.Cat.* I, nos. 229b.1 and 229b.3) were from officina Γ. *D.O.Cat.* I, nos. (229a) and (229c) were citations of Ratto no. 668 for A and Tolstoi no. 282 for Δ, respectively. Neither of these latter coins was illustrated, and the mint mark for Tolstoi no. 282 was not given although the immediately preceding coin, no. 281 of officina Γ, had the mark given as ϚHЧℙ*·, My collection contains six folles of this regnal year 33 (559/60): two (not from the same dies) of officina B with mark ϚHЧℙ* one Γ with ϚHЧℙ, one Γ with ϚHЧℙ', and one Γ and one Δ with ϚHЧℙ* (nos. 12–17).

While the Note (p. 94) dates Class E half-folles to the year 556/7 and Class F to the year 562/3, the catalogue (pp. 141 and 150–151) dates them, respectively, to the periods 556/7–558/9 and 562/3–564/5. Class E was assigned the mint mark ℙ and Class F the mark ℙ. Apparently overlooked in the dating of Class F were Wroth no. 323 with mark ℙ of year 557/8 and Tolstoi no. 379 (his pl. 24) with mark ℙ of year 558/9. In my collection there are three half-folles of 557/8 with the mark ℙ, and another of that year with the mark P (nos. 18–21). In my collection there is also a half-follis of the year 556/7 with the mark ⸮ which more closely resembles ℙ than the ℙ of Class E (no. 22). Class F thus was struck in all three years assigned to Class E. Classes E and F of the half-folles should probably be merged, as previously suggested for Classes C and D of the half-folles, and Class E considered merely a variety of the combined class.[8]

[7] Although the usual mark of Class F is ϚHЄЧP, there is an example in my collection of a follis of the year 564/5 with the mark ϚHЄЧPS (no. 11).

[8] The mint mark of *D.O.Cat.* I, no. 250 is illegible. Confirmation of the mint mark ℙ for the year 564/5 is provided by four half-folles of that year in my collection (nos. 23–26).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

(d) *Blundered Inscriptions*. Bellinger has described the drastic change which occurred in the cutting of obverse die inscriptions at Antioch in regnal year 562/3 (Note, p. 96). In the D.O. catalogue he dated the change to 561/2 (p. 147, notes to (231) and 232a). I suspect that the blundered legends first appeared in 562/3 as Bellinger originally stated. His reference to Wroth no. 311 for a blundered legend of 561/2 is questionable, for Wroth indicated that this follis might be of a later date. In the year 562/3 there are examples of both normal and blundered legends.[9] The abrupt change to blundered legends must have come some time after the beginning of that regnal year. In subsequent years of the reign nearly all obverse inscriptions were blundered.[10]

Bellinger's explanation (Note, p. 96) that the blundering of legends at Antioch in the last years of Justinian's reign, 562–565, was the result of the illiteracy of the die sinkers, and that the designers of obverse and reverse were not the same individuals, is plausible but unsatisfactory in several respects. The illiteracy hypothesis requires, first, the reasonable assumption that there was a division of labor among the die sinkers at the mint whereby certain of them produced the reverse dies, others the obverse. Subordinate assumptions are more questionable. Implicit in the hypothesis is an abrupt change of personnel for the production of obverse legends only, and that the new die sinkers were not only ignorant of Latin but also quite incapable of copying models available to them. At the same time, however, die sinkers working on the obverse busts and on the reverses were capable of making accurate copies of effigies, numerals and letters. There is also an assumption that there was no overall supervision of the die sinkers' work, nor any mutual assistance or criticism among the workmen. If the work of apprentices is involved, it is strange that there should

[9] In addition to the meaningless obverse inscription, the mint mark of *D.O.Cat.* I, no. 232a is slightly blundered as ϚHЄꝸP (pl. XXXIX), although this sort of blunder is not uncommon. Since *D.O.Cat.* I, no. (232b) is but a reference to Tolstoi no. 285 and Tolstoi does not illustrate the coin, we cannot know whether it had the normal or a meaningless inscription. Wroth no. 337, however, which is a decanummium of 562/3, has a normal obverse legend.
[10] There are, in my collection, a follis of 562/3 and a half-follis of 563/4 with normal inscriptions (nos. 27 and 28). See also no. 24 of the year 564/5 with only a partially blundered inscription.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

have been no master workman to train and guide them in copying. And where was the mint master while these imperfect coins were being issued over a three-year period?

While it is possible to raise such questions about the offered explanation, it is by no means easy to find a better hypothesis than illiteracy to account for the blundered inscriptions. One approach would be to reexamine an underlying premise. The inscriptions are, as Wroth said, "meaningless," but are they "blunders"?[11] If the opposite were assumed, that they were not blunders but intentional, all the problems and questions suggested above would be removed. But a formidable new problem would be created. Could there conceivably have been any reason for substituting a meaningless inscription for the name and titles of the emperor? Such a reason could have been the great unpopularity of Justinian or the imperial authority in Antioch.

In Antioch, with its history of quasi-independence from Constantinople and its continuing religious strife, an anti-imperial posture on the part of a substantial number of the populace would not be surprising. Our knowledge of the period 562–565 at Antioch is, unfortunately, too fragmentary to provide any definite basis supporting this reason for expunging the emperor's name from the coinage. One clue might be Justinian's persecution of the pagans, and in particular his prosecution of several pagan priests, two of them from Antioch, in the year 562.[12] Antioch was one of the centers where paganism and heresies persisted and remained strong. If the meaningless inscriptions were intended as retaliation for such persecution, or for any other unpopular action, they held the virtue that, if challenged, they could be blamed by the mint master on the poor workmanship of apprentices ignorant of Latin. This alternative to the not wholly satisfactory illiteracy hypothesis is offered, without conviction, in the hope that it may lead to further study of the enigma.

[11] Garbled and blundered legends produced at Antioch for Maurice, and at the Isaurian mints for Heraclius, are of a different order than those considered here.

[12] Downey, *Ancient Antioch* (Princeton, 1963), p. 258, citing Michael the Syrian, *Chronicle* II, p. 271 (trans. Chabot).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Justinian I, Antioch, Æ, follis, 542/3.

Obv.: Armored bust facing; in r., gl. cr.; in field r., cross.
Rev.: M Above, cross; to l., ANNO (vertical).

1. *Obv.*:]NI ANVSPPAVC
   Rev.: To r., XϞ[I?];[13] beneath, A; in ex. C$\overline{\text{H}}$ЄЧPO
   21.95 ↘ 39 mm.
2. *Obv.*: DNIVSTINI ANVSPPAVC
   Rev.: To r., XϞ; beneath, B; in ex. C$\overline{\text{H}}$ЄЧPO
   23.31 ↘ 39 mm.
3. *Obv.*:]NIVSTINI ANVSPPAVC
   Rev.: To r., $\overset{\text{XϞ}}{*}$; beneath, B; in ex. C$\overline{\text{H}}$ЄЧPO
   21.92 ↘ 41 mm.
4. *Obv.*: DNIVSTINI ANVSPPAVC
   Rev.: To r., XϞ; beneath, Γ; in ex. C$\overline{\text{H}}$ЄЧPO
   20.79 ↘ 39 mm.
5. *Obv.*: DNIVSTINI ANVSPPAVI
   Rev.: To r., XϞ; beneath, Δ; in ex. $\overline{\text{C}}\overline{\text{H}}$ЄЧPO
   20.31 ↘ 39 mm.

[13] On the coin the date appears from sight and touch to be XϞI (543/4), but on the cast from which the illustration was made the I appears possibly to be a continuation of the inner edge of the border. This uncertainty is unfortunate since the date is of some significance. The bubonic plague reached Antioch and Constantinople from Egypt in A.D. 542. Although there was no apparent cessation of coinage at Constantinople in Justinian's regnal years 543/4, 544/5 and 545/6, no coins struck at Antioch during those three years have been published. In the catalogue (p. 143) Bellinger ascribed this three-year gap to "the onset of the Great Plague" and in his Note (p. 95) said, "In its first year [542/3] the mint continued to operate . . . but thereafter all normal civic activity must have been paralyzed." What little information is available would not indicate a duration of a year, let alone four years, for the severe stages of this plague either at Constantinople or Antioch. The plague did not seriously interrupt the coinage at Constantinople. At Antioch, however, the city in 542 had not recovered from the devastation wrought by the Persians in 540. The probability is that the combination of Persians and Plague had so reduced the population and economic activity of the city that the mint production of 542/3 (and 543/4?) was adequate for commercial needs until the resumption of coinage in 546/7.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Justinian I, Antioch, Æ, follis, 549/50.

6. *Obv.*: Armored bust facing; in r., gl. cr.; in field r., cross.
DNIVSTINI ANVSPPAVC
Rev.: M Above, cross; to l., ANNO (vertical); to r., X / X / III; beneath, Γ; in ex. ЧНЧ☆
18.62 ↘ 35 mm.

Justinian I, Antioch, Æ, half-follis, 554/5.

7. *Obv.*: Armored bust facing; in r., gl. cr.; in field r., cross.
]VSPPAVC
Rev.: K Above, cross; to l., ANNO (vertical); to r., XXЧII; beneath, ☆
9.85 ↖ 27 mm.

Justinian I, Antioch, Æ, decanummium, 547/8.

8. *Obv.*: Armored bust facing; in r., gl. cr.; in field r., cross.
DNIVSTIIII]PAVI
Rev.: I surmounted by cross; to l., ANNO (vertical); to r., X / X / I; in ex. ЧНЧ☆
3.80 ↘ 24 mm.

Justinian I, Antioch, Æ, decanummium, 549/50.

Obv.: Armored bust facing; in r., gl. cr.; in field r., cross.
Rev.: I surmounted by cross; to l., ANNO (vertical).

9. *Obv.*: DNIVSTINI ANVSPPAV
Rev.: To r., X / X / III; in ex. ЧНЧ☆
5.29 ↘ 23 mm.

10. *Obv.*: DИIVSTI[ANVSPP[]VC
Rev.: To r., X / X / III; in ex. ЧНЧ☆ I
3.81 ↘ 22 mm.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Justinian I, Antioch, Æ, follis, 564/5.

11. *Obv.*: Armored bust facing; in r., gl. cr.; in field r., cross. NVIISDPA[
Rev.: M Above, cross; to l., ANNO (vertical); to r., X X X ; beneath, ?; in ex. ϚHЄЧPS
18.38 ↘ 37 mm.

Justinian I, Antioch, Æ, follis, 559/60.

Obv.: Armored bust facing; in r., gl. cr.; in field r., cross.
Rev.: M Above, cross; to l., ANNO (vertical).

12. *Obv.*: DNIVSTINI[
Rev.: To r., X X X ; beneath, B; in ex. ϚHЧP*
III
15.89 ↘ 33 mm.

13. *Obv.*: ᑎNIVSTINI ANVSPAV
Rev.: To r., X X X ; beneath, B; in ex. ϚHЧP*
III
18.59 ↘ 34 mm.

14. *Obv.*:]TINI AN[
Rev.: To r., X X X ; beneath, Γ; in ex. ϚHЧP
III
18.86 ↘ 34 mm.

15. *Obv.*: ONIVSTNI ANVSPPA
Rev.: To r., X X X ; beneath, Γ; in ex. ϚHЧP
III
19.11 ↘ 34 mm.

16. *Obv.*: DNIVSTINI ANVSPPVAI
Rev.: To r., X X X ; beneath, Γ; in ex. ϚHЧP*
III
18.48 ↘ 33 mm.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

17. *Obv.*: DNIVSTINI ANVSPPAC
Rev.: To r., X / X / X / III; beneath, Δ; in ex. ϽHЧ℘*
17.87 ↘ 34 mm.

Justinian I, Antioch, Æ, half-follis, 557/8.

Obv.: Armored bust facing; in r., gl. cr.; in field r., cross.
Rev.: K Above, cross; to l., ANNO (vertical).

18. *Obv.*:]ANVSPPAVC
Rev.: To r., XXXI; beneath, ℘
10.14 ↖ 29 mm.

19. *Obv.*: DNIVSTINI]VSPP^C
Rev.: To r., XXXI; beneath, ℘
9.42 ↖ 28 mm.

20. *Obv.*:]VSTINI ANVSPP^V
Rev.: To r., XXXI; beneath, ℘
9.97 ↖ 26 mm.

21. *Obv.*:]NIVSTINI]SPP[
Rev.: To r., XXXI; beneath, P
9.09 ↖ 25 mm.

Justinian I, Antioch, Æ, half-follis, 556/7.

22. *Obv.*: Armored bust facing; in r., gl. cr.; in field r., cross.
]STINI ANVSPPAV
Rev.: K Above, cross; to l., ANNO (vertical); to r., XXX; beneath, ℘
10.27 ↖ 29 mm.

Justinian I, Antioch, Æ, half-follis, 564/5.

Obv.: Armored bust facing; in r., gl. cr.; in field r., cross.
Rev.: K Above, cross; to l., ANNO (vertical).

23. *Obv.*:]ιSιι'[
Rev.: To r., XXX / ЧII; beneath, ℘
9.15 ↑ 27 mm.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

24. *Obv.*: D NIVSTN[AAVSPP
Rev.: To r., XXX / ꝟII; beneath, ℟
8.93 ↖ 26 mm.

25. *Obv.*:]ll ΛlOꝟ[
Rev.: To r., XXX / ꝟII; beneath, P
8.46 ↗ 26 mm.

26. *Obv.*:]P[
Rev.: To r., XXX / ꝟII; beneath, ℟
6.87 ↘ 26 mm.

Justinian I, Antioch, Æ, follis, 562/3.

27. *Obv.*: Armored bust facing; in r., gl. cr.; in field r., cross.]VST[ANVSPPAV
Rev.: M Above, cross; to l., ANNO (vertical); to r., X / X / X / ꝟI; beneath, Γ; in ex. ƧHЄꝟP
17.65 ↘ 35 mm.

Justinian I, Antioch, Æ, half-follis, 563/4.

28. *Obv.*: Armored bust facing; in r., gl. cr.; in field r., cross.]VSTINI]PPΛV
Rev.: K Above, cross; to l., ANNO (vertical); to r., [X]XX / ꝟI; beneath, ℟
11.13 ↖ 30 mm.

2. A Maurice Pentanummium from Cyzicus

In the reign of Maurice Tiberius (A.D. 582–602), folles, half-folles, and decanummia struck at Cyzicus have been recorded, but apparently no pentanummia. Pentanummia were struck there in the reigns of Justinian I and Justin II, and were also struck for Maurice at the mints of Constantinople, Nicomedia, Antioch, Carthage and

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Catania. The following pentanummium in my collection adds Cyzicus to this list.[14]

Maurice Tiberius, Cyzicus, Æ, pentanummium.

29. *Obv.*: Diademed bust r.
ONTMA VRICPP[
Rev.: Є To r., K
1.68 ↗ 17 mm.

3. The Antioch Mint under Heraclius

The Antioch mint was active during the early Byzantine period from Anastasius through the reign of Phocas. It has been thought that Antiochene coins dated in the first year of Heraclius' reign (610/1), struck before the Persian conquest of May 611, might eventually come to light, but thus far they have not. The probability is that the mint was closed in the last month of Phocas' reign when mint operations were disrupted during the riots, the conflicts between the Blue and the Green factions, and between Jews and Christians. It would be understandable why the mint was not reopened in those troubled times. The subsequent decline in the commercial importance of Antioch under the Persians and thereafter would explain why the mint was not reopened after the city was retaken in 528 and held for the decade before the Arab invasion.

Two, and possibly three, issues of coinage during the Heraclian period merit comment. To take the most dubious first, there are some folles of the emperor Phocas which appear to be dated to his ninth regnal year.[15] Either these resulted from careless cutting of the numeral five (a 6 or 9 for a 5) in the date, as seems to be the probable explanation, or dies for the regnal year 9 had been cut before Phocas' death and were used in the first months of Heraclius'

[14] See George E. Bates, *Sardis*, Vol. I, *Byzantine Coins, 1958–1968* (Cambridge, Mass., 1970), nos. 254 and 255 for pentanummia from the Cyzicus mint which were tentatively attributed to Justinian I but may have been of Maurice, as indicated in a note. The inscriptions are illegible.
[15] Bates, "A Byzantine Hoard from Coelesyria," *ANSMN* 14 (1968), p. 101, comment on no. 186.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

reign before new models could have been received from Constantinople, if any were sent.[16] The eighth regnal year of Phocas (609/10) would have ended on November 22, 610, but was terminated by his execution on October 4. This news should have reached Antioch long before November 22.

A follis dated in Heraclius' regnal year 14 (623/4) having the mint mark ϚHP was probably struck at Antioch, but under Persian auspices, to supply a Byzantine type for the Byzantine populace. Three specimens of this follis are known to me: one in the Archaeological Museum at Istanbul, one in the British Museum[17] and one in my collection. All three were struck from the same dies, as Dr. Kent pointed out to me when we were comparing our two specimens with an impression of the one at Istanbul. This follis has the Heraclius, Heraclius Constantine and Martina obverse type (correct for the date), and a poorly executed IIII of the $\overset{X}{\text{IIII}}$ date, although this corresponds rather closely to the IIII in the date of a follis from Alexandretta in the interregnum of A.D. 610 (see *D.O.Cat.* II.1, no. 17, pl. VII). It is of sub-standard weight, 4.46 gr. for the coin in my collection (no. 31).

Heraclius, Antioch, Æ, follis, 623/4.

31. *Obv.*: Three standing figures facing; each wears chlamys and crown with cross; each holds in r., long cross.
Rev.: M Above, cross; to l., ANNO (vertical); to r., $\overset{X}{\text{IIII}}$; beneath, B; in ex. ϚHP
4.46 ↘ 28 mm.

[16] There is also a Cyzicus follis of Phocas with the date ϥIII in my collection:
30. Phocas, Cyzicus, Æ, follis (pierced).
Obv.: Consular bust facing; in r., mappa, with cross in field above; in l., cruciform scepter.
ϑNFOC[ ]S PЄRPAVC
Rev.: XXXX Above, ANNO; to r., ϥIII; in ex. KYZ^
12.77 ↙ 31 mm.
See also *D.O.Cat.* II, 1, no. 76a (Whittemore coll.), different obv. die.
[17] Not in Wroth.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The other and unique follis, which is in the Archaeological Museum at Istanbul,[18] appears to be of imperial quality. It bears the mint mark ϚHЄЧP and has the date $\frac{X}{III}$, 622/3 (no. 32). It is of the Heraclius and Heraclius Constantine type which had been superseded by the Heraclius, Heraclius Constantine and Martina type in 615/6 at Constantinople and Nicomedia, although types without Martina appeared as late as 617/8 at Isaura and 619/20 at Thessalonica.

Although little is known of the history of Antioch at this period, it is reported that an army of Heraclius was defeated "under the walls" of Antioch in 622.[19] We are not informed whether that army was defeated there when it first reached the city or after it had succeeded in taking the city briefly only to be defeated when it debouched from the walls to meet an approaching army of Persians. Whatever the order of events, it is possible that this coin was struck in anticipation of retaking the city, and that those minted were used only for the payment of troops.

Heraclius, Antioch, Æ, follis, 622/3.

32. *Obv.*: Heraclius and Heraclius Constantine standing facing; each wears chlamys and crown with cross; cross between heads. Inscription obscure.

Rev.: M Above, ✱; to l., [A]NNO (vertical); to r., $\frac{X}{III}$; beneath, Γ; in ex. [Ϛ]HЄЧP

↖ 29 mm.

4. The Third Officina at Seleucia

In a note to a catalogue of the Coelesyria Hoard the existence of a third officina, Γ, at the Seleucia mint was postulated on the basis

[18] I am indebted to Bay Necati Dolunay, Director of the Archaeological Museum, and to Bayan Nekriman Olcay of the Department of Coins in that Museum for their gracious assistance in my study of their Byzantine coin collection, and for permission to make impressions and photographs relating to this Note. [After this article went to press Jean Ch. Balty published "Un follis d'Antioche date de 623/624 et les campagnes syriennes d'Heraclius," *SM* 20 (1970), pp. 4–12, describing a similar follis of the Heraclius and Heraclius Constantine type, with officina Є - - *ed.*]

[19] Sebeos, *Hist. of Heraclius*, 24.67 (trans. F. Macler, Paris, 1904), quoted in Glanville Downey, *History of Antioch*, p. 575.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of a single example.[20] This was a follis of Heraclius and Heraclius Constantine, standing figures type, of regnal year 7, 616/7. Confirmation of that officina has been provided by my subsequent acquisition of another follis of that mint, officina and date (no. 33). This follis, however, is of the two-busts type, which shows that officina Γ struck both types, as did officinae A and B.

The above mentioned note proved the striking of both types by officina A (coin 5 as compared with coins 1–4). It also showed that officina B struck the two-busts type in the half-follis (coin 8) as opposed to the then known folles of officina B which were of the standing figures type. A two-busts type follis from officina B which I have recently acquired proves that both types were struck in the folles (no. 34, a very poor specimen). Another recent acquisition of mine illustrates the more common standing figures type (no. 35).

The only examples from officinae Δ and Є thus far known are of the two-busts type, but it would not now be surprising if standing figures types from those two officinae should eventually be found. Evidently there was no sequence in the striking of the two types, for the two-busts type appears in 615/6 at Seleucia and in 617/8 at Isaura.

Heraclius, Seleucia, Æ, follis, 616/7.

33. *Obv.*: Busts of Heraclius and Heraclius Constantine facing; each wears crown with cross; cross between heads.
ϒϒИИhЄK≺ CLIh'b[Є]ƨCI
Rev.: M Above, ✱; to l., ANNO (vertical); to r., 9I; beneath, Γ; in ex.]SЧ
17.00 ↘ 33 mm.

34. *Obv.*: Busts of Heraclius and Heraclius Constantine facing; each wears crown with cross; cross between heads.
]N[ ]h[ ]Ч[
Rev.: M Above, ✱; to l., ANNO (vertical); to r., 9I; beneath, B; in ex.]ЄL'SЧ
11.97 ↗ 31 mm.

[20] Bates, "A Byzantine Hoard from Coelesyria," *ANSMN* 14 (1968), pp. 76–81.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

35. *Obv.*: Heraclius and Heraclius Constantine standing facing; each wears chlamys and crown with cross; cross between heads. ꝊꝊNИꝑ[Є] A IN Ƨ[ ]Єhꝛ[

Rev.: M Above, [✱]; to l., ANNO (vertical); to r., ꝉI; beneath, B; in ex. SЄƧIS⊃

Overstruck on Constantinople flan

10.13 ↘ 30 mm.

5. An Addition to the 30 Nummi Coinage

Tiberius II, Phocas, Heraclius and Constantine IV struck coins in the unusual denomination of 30 nummi.[21] Such coins of Tiberius II and Phocas bore the Latin marks of value XXX while those of Heraclius and Constantine IV had the Greek Λ. The 30 nummi coins of Tiberius II and Constantine IV were undated. Those thus far recorded of Phocas bear the dates ꝉ and ꝉI, A.D. 607/8 and 608/9. Those of Heraclius heretofore reported are of the Heraclius and Heraclius Constantine standing figures type, Class 5 (Heraclius in military dress and Heraclius Constantine in chlamys), and bear the date $\overset{X}{X}$, 629/30.

In my collection there is the following 30 nummi piece of the facing bust with long beard type which by analogy with the unique similar type of decanummium, *D.O.Cat.*, II.1, no. 128, may be dated to the year 639/40:

Heraclius, Constantinople, Æ, 30 nummi.

36. *Obv.*: Bust with long beard, facing; crown with cross; part of inscription shows on l. but is illegible.

[21] For Tiberius II see Wroth nos. 38–42 for the five officinae of Constantinople, nos. 71–72 for the two officinae of Nicomedia, and no. 107 for Antioch; and see *D.O.Cat.* I, nos. 37a and b for the two officinae of Cyzicus. For Phocas see Tolstoi no. 85 for ꝉ, A, and *D.O.Cat.*, II.1, no. 34 for ꝉI, Є, of Constantinople (in my collection there are two ꝉI, A, of Constantinople); and see *D.O.Cat.*, II.1, no. 77 for ꝉ of Cyzicus. For Heraclius see *D.O.Cat.*, II.1, nos. 117a.1–117d.3 for $\overset{X}{X}$, A, B, Γ, Δ, of Constantinople and *D.O.Cat.*, II.1, no. 152 for $\overset{X}{X}$, Δ, of Thessalonica. For Constantine IV see *D.O.Cat.*, II.2, no. 34 for B of Constantinople.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: Λ; on l., A[]N[(vertical); on r., defaced by cut; beneath, A; ex. illegible

1.87 ↙ 18 mm.

The missing exergual legend is probably CON. I had initially attributed this coin to Constans II, as *D.O.Cat.*, II.1, no. 128 had been so attributed by its previous owner, but I concur in Grierson's reattribution of that coin to Heraclius, partly because of its type's closer resemblance to a bust of Heraclius, but specifically because of its probable date of regnal year 30 which would have exceeded the span of Constans' reign. The 30 nummi coin appears to be a companion of the Dumbarton Oaks decanummium, and consequently is also probably of regnal year 30. The weight of the decanummium is approximately correct for Heraclius' Class 6, instituted in 639/40, and that of the 30 nummi probably would be if allowance were made for wear and the large cut on the right. If these two coins are of Heraclius rather than Constans II, it is reasonable to assume that a half-follis of Class 6 will eventually come to light. Presumably it would be of the bearded bust type.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THREE NOTES ON ARMENIAN COINS

(PLATES XXII–XXIII)

PAUL Z. BEDOUKIAN

The Notes are organized under the following headings:

1. The Reverse Legend of the Copper Coins of Baron Toros I.
2. A Unique Double Tram of King Levon I.
3. A Unique Tank of King Levon II.

1. THE REVERSE LEGEND OF THE COPPER COINS OF TOROS I

The coinage of the Barons of Cilician Armenia has not been studied extensively, no doubt because of the paucity of specimens. In a recent effort by the author to attribute and classify the existing specimens, it was still not possible to offer a reading of the reverse inscription of the coins of Toros I (A.D. 1100–1123).[1]

Since the publication of the above-mentioned study, however, additional coppers of Toros I have come to light, furnishing more evidence for the reading of the abbreviated reverse legend. It was first assumed that, since the Armenians were in such close contact with the Crusader princes, the meaning of the legends of the Armenian coins and the contemporary Crusader coins must be related. Both coinages stood at the beginning of their respective systems. When Toros succeeded his father, Gosdantin I (A.D. 1100), the Armenians and the Crusaders were at war with the Mohammedans. Antioch had been captured in 1098 and Bohemund had become its first ruler. In 1100, Bohemund was taken prisoner by the Saracens, and Tancred became Regent of that city until his death in 1112. The principality of Antioch was adjacent to Cilician Armenia and its history was closely tied to developments in Armenia.[2] Under these circumstances, it would not be surprising to find a relationship between the coinages of the two newly established principalities.

[1] Bedoukian, *ANSMN* 12 (1966), pp. 139–145, esp. pp. 140f.

[2] See Bedoukian, *NC* 1967, pp. 189–197, where this fact is discussed in the context of the late 12th-early 13th centuries.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The most prominent inscription on the reverse of the copper coins of Tancred is IC XC NI KA (IHSOU XRISTOU NIKA—"Jesus Christ conquers") placed in the four sections of the cross. It should be recalled that the same type of legend appears on the copper coins of Alexius I (1081–1118);[3] in all likelihood, Tancred followed the Byzantine example of striking coins with this legend.

On the reverse of the copper coins of Toros, of which about ten specimens are known, is a cross with letters in the third and fourth quarters. None of the small number of coins known has letters in the first and second quarters of the cross. However, a new type copper of Toros I recently acquired by John J. Slocum (PLATE XXII, 1 and Fig. 1, a)[4] has letters in four sections of the cross. The groups of letters read: ՏՓ ՅԱ ՂՔ ՈՂ. The last six letters form the complete word ՅԱՂՔՈՂ—"one who conquers." Examination of other specimens of Toros' coins revealed that in all cases the two letters in the fourth section of the cross are clearly ՂՔ and as such represent an abbreviation of the word ՅԱՂՔՈՂ. Furthermore, all the coins examined, including the Slocum specimen, have as the second letter of the legend, Փ, which obviously stands for ՔՐԻՍՏՈՍ or "Christ." Although a true representation of this letter should be Ք rather than Փ (the horizontal bar should extend to the left of the vertical line), many variations of this letter are found on coins of Cilician Armenia, including numerous cases where the horizontal bar is missing entirely. Thus the words "Christ conquers" are completed, but an explanation of the first letter must still be found. The first letter of the Slocum specimen differs entirely from that on all the other specimens. The letter is clearly Տ and stands for ՏԷՐ or "Lord," giving a complete phrase ՏԷՐ ՔՐԻՍՏՈՍ ՅԱՂՔՈՂ or "Lord Christ conquers." In the other specimens (PLATE XXII, 2 and Fig. 1, b) the first letter differs in appearance, and must be taken for Խ, (ԽԱՉՆ or "cross"). The phrase now becomes ԽԱՉՆ ՔՐԻՍՏՈՍԻ ՅԱՂՔՈՂ, "the cross of Christ con-

[3] Wroth, *BMCByz.*, p. 553, Type 11.

[4] I wish to express my sincere appreciation to Mr. John J. Slocum for affording me the opportunity to study and publish his coin. I am also indebted to His Grace Archbishop T. Nersoyan without whose assistance and advice it would not have been possible to complete the reading of the legend of this coin. I am obliged to Mr. Edwin P. McIntyre for the photography of all specimens illustrated herein.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

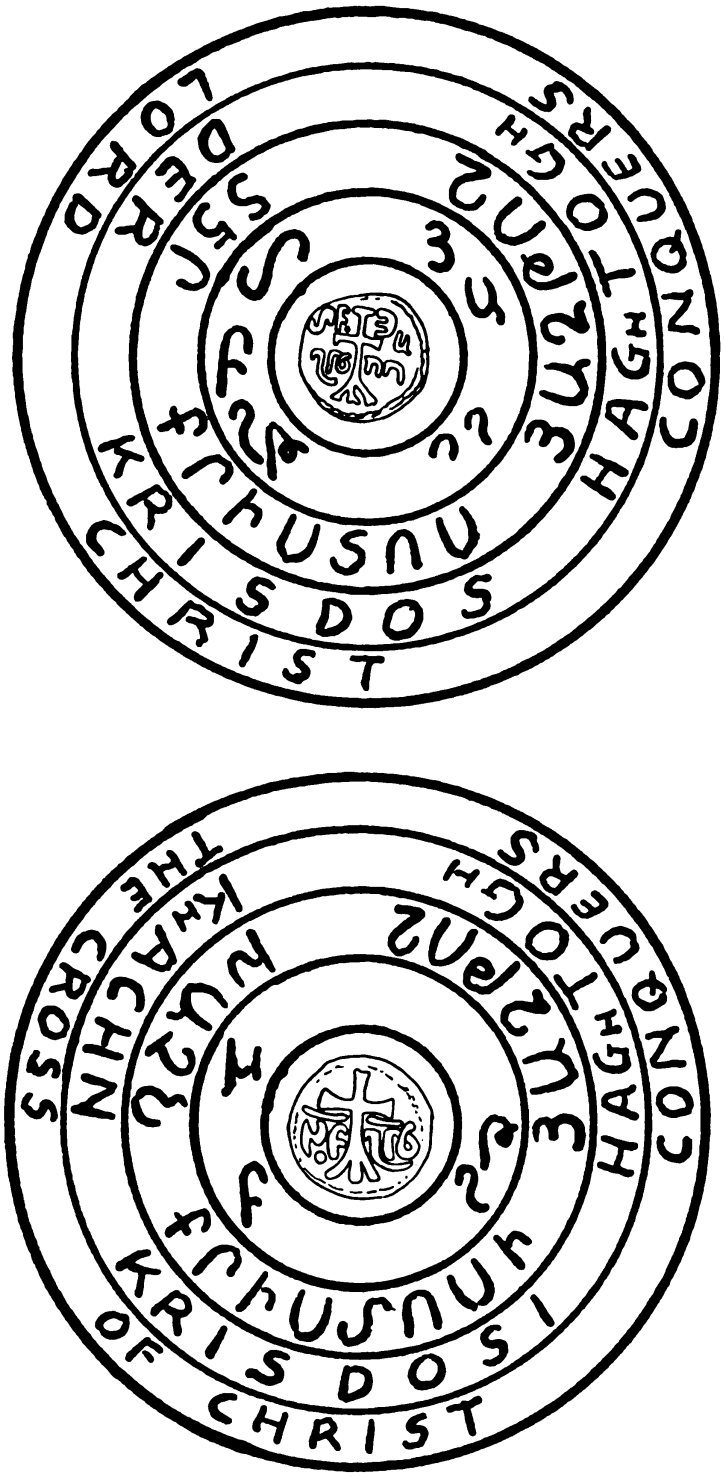


FIG. 1

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

quers." Both this phrase and "Lord Christ conquers" are linguistically correct and represent proper usage in mediaeval Armenian writings.[5]

The legend on the obverse is clear and has already been deciphered as ԹՈՐՈՍԻ Է ՌՒՖ, or "Toros of the Rupinians." The cross on the reverse is of an unusual type and is peculiar to Toros I.

It is noteworthy that the coins of Alexius I, Tancred and Toros I all fall within a very short period of time and their legends illustrate the struggles of the three Christian powers against a common foe. There is little doubt that the Armenian coins belong to Toros I rather than Toros II who reigned a half century later.

2. A Unique Double Tram of Levon I

Recently, the author acquired a small hoard consisting of eight double trams, reportedly found near Sis, the ancient capital of Cilician Armenia. The small number of coins in the hoard made it of little value for numismatic study, except for the presence of a unique double tram of Levon I (A.D. 1198–1219).

Most of the silver coins of Levon I which have come down to us are trams. On the obverse, the king is portrayed seated on a throne ornamented with lions. He wears a crown and royal vestments and holds a globus cruciger in his right hand, and a fleur-de-lis in his left. On the reverse, a crowned lion to left, facing, holds a double bar cross with his right paw. The legend in Armenian reads, "By the power of God." There are various field marks.

The double trams of Levon I are rare; to date the writer has seen somewhat less than 150 specimens. All of them are of the type described above, except that the king's feet rest on a pedestal (Plate XXII, 3). The legend in Armenian reads, "Levon King of all the Armenians." The discovery of a new type with the lion facing left and walking (Plate XXII, 4) is significant in that it may represent the beginning of a type which eventually became standard in Cilician Armenia.

[5] In all cases there is a dot between the letters ՀՍ and ՖՒ; its meaning remains unexplained unless one assumes that it indicates that the two letters represent separate words. The lines above the letters indicate that the words are abbreviated.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The hoard contained the following coins:

1. *Obv.*: ԼԵՒՈՆ ԹԱԳԱՒՈՐ ԱՄԵՆԱՅՆ ՀԱՅՈՑ
   Rev.: ԿԱՐՈՂՈՒԹԵԱՄԲՆ ԱՍՏՈՒԾՈՅ No field mark.
   (*NNM* 147[6], no. 13)

2. *Obv.*: Same die as no. 1.
   Rev.: ԿԱՐՈՂՈՒԹԲՆ ԱՍՏՈՒԾՈՅ Cinquefoil to left of lion.
   (*NNM* 147 not)

3. *Obv.*: ԼԵՒՈՆ ԹԳՐ ԱՄԵՆԱՅՆ ՀԱՅՈՑ
   Rev.: Same die as no. 2.

4. *Obv.*: ԼԵՒՈՆ ԹԳՐ ԱՄԵՆԱՅՆ ՀԱՅՈՑ
   Rev.: ԿԱՐՈՂՈՒԹԲՆ ԱՍՏՈՒԾՈՅ Cinquefoil to left of lion.
   (*NNM* 147, no. 23)

5. *Obv.*: ԼԵՒՈՆ ԹԳՐ ԱՄԵՆԱՅՆ ՀԱՅՈՑ
   Rev.: ԿԱՐՈՂՈՒԹԵԲՐ ԱՍՏՈՒԾՈՅ No field marks.
   (*NNM* 147 not)

6. *Obv.*: ԼԵՒՈՆ ԹԳՐ ԱՄԵՆԱՅՆ ՀԱՅՈՑ
   Rev.: ԿԱՐՈՂՈՒԹԲՆ ԱՍՏՈՒԾՈՅ Cinquefoil to left of lion and „ above lion.
   (*NNM* 147 not)

7. *Obv.*: ԼԵՒՈՆ ԹԳՐ ԱՄԵՆԱՅՆ ՀԱՅՈՑ
   Rev.: ԿԱՐՈՂՈՒԹԲՆ ԱՍՏՈՒԾՈՅ Cinquefoil to left of lion and „ above lion.
   (*NNM* 147, no. 25)

8. *Obv.*: ԼԵՒՈՆ ԹԱԳԱՒՈՐ ԱՄԵՆԱՅՆ ՀԱՅՈՑ
   Rev.: ԿԱՐՈՂՈՒԹԵԱՄԲՆ ԱՍՏՈՒԾՈՅ No field marks.
   (PLATE XXII, 4)

   Lion crowned and walking to left. Double bar cross behind and above lion. The styling is very similar to the trams of succeeding kings except that lion is to left instead of right.

It should be mentioned that Levon I struck smaller denominations of the regular double tram type, consisting of half and quarter double

[6] P. Z. Bedoukian, *Coinage of Cilician Armenia*, *NNM* 147 (New York, 1962).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

trams. In every case, the lion is to left and holds a double bar cross with his right paw. No coin of this type showing the lion walking has yet been discovered.

There are, however, a few coronation trams of Levon I which portray a lion walking right, facing, with a double bar cross above (PLATE XXII, 5). The great majority of the coronation trams have on the reverse two lions rampant regardant, with a cross between them. The same reverse design appears on Levon's ordinary trams, which constitute the bulk of his silver currency.

All the succeeding rulers issued trams with the lion to left or right, facing. Hetoum-Zabel (1226–1270) first struck trams with the lion to right, holding the cross (PLATE XXII, 6), and later with the lion walking right (PLATE XXII, 7), the cross behind and above it. For a century after, subsequent rulers struck silver coins with the lion walking right or left but very rarely holding the cross (PLATE XXII, 8–9, trams of Levon II).

The existence of a double tram of Levon I with the lion walking can hardly be the result of a die engraver's whim. It is so similar in type and design to the coins of later rulers that it should be considered a new, planned design in Levon's coinage. If this explanation is accepted, it then follows that this coin was most likely struck toward the end of Levon's reign, since none of the common trams show a single lion. Perhaps half double trams with a single lion will be discovered in the future, thus confirming a definite change in the pattern of the coinage of Levon I.

3. A UNIQUE COPPER TANK OF LEVON II

In reviewing the coinage of Cilician Armenia, one is struck by the gradual reduction of the weight and size of the copper coins. The early silver trams were of very high silver content and of uniform weight.

The first king, Levon I (1198–1219) struck only large copper tanks averaging 7–8 gr. They are of an original, distinctive style (PLATE XXIII, 1). On the obverse the leonine head of the king, bearded and crowned, is portrayed. The legend in Armenian reads "Levon King of the Armenians." On the reverse is a patriarchal cross with two

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

stars in the field. On a small number of coins, the cross has steps, recalling the Byzantine style. The legend in Armenian reads, "Struck in the city of Sis."

Levon's successor, Hetoum I (1226–1270) struck copper tanks similar in size and weight to the coppers mentioned above (PLATE XXIII, 2), as well as smaller copper coins called kardez (PLATE XXIII, 3–4), averaging 3.5–4.5 gr. in weight. On the obverse of the tanks, the king is shown seated on a throne, often ornamented with lions, wearing a crown and royal vestment, a scepter in his right hand and a globus cruciger in his left. The legend in Armenian reads: "Hetoum King of the Armenians." On the reverse is a cross potent with various field marks. The legend is again "Struck in the city of Sis."

The kardez coppers are smaller versions of the tank, but with the addition of a second obverse type, king on horseback, reminiscent of the bilingual trams of Hetoum. On the reverse appears the usual cross with field marks. The legend on the kardez is similar to that on the tank.

Until recently, there was no evidence of tanks struck by Hetoum's successor, Levon II (1270–1289), and it was assumed that none had been issued. Moreover, a dimunition in the size of copper coins with each succeeding king led to the belief that the striking of tanks ceased during the reign of Hetoum in favor of the issuance of the smaller kardez. It therefore appeared that tanks were struck by Levon I and continued by Hetoum, who at some point terminated this series and limited his copper coinage to the smaller kardez.

The discovery of a tank of Levon II (PLATE XXIII, 5) dictates a modification of this theory. This coin, found in an accumulation of Armenian copper coins, is obviously authentic. It must now be concluded that Levon I struck only large tanks and his successor struck both tanks and kardez coppers throughout his reign. Levon II apparently began his reign by continuing to strike both the tank and the kardez (PLATE XXIII, 6) but was soon forced to limit his coinage to the smaller kardez coppers.

It will be seen that the design of this unique tank is identical with the common kardez struck by Levon II. On the obverse the lion is

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

walking left; the legend in Armenian reads, "Levon King of the Armenians." On the reverse is the typical cross of the copper coins of Hetoum I, with field marks and the legend "Struck in the city of Sis." The similarity in the design of the two denominations is striking.[7]

[7] The inscription naming the king (and therefore denoting the obverse) appears variously with the lion and cross types, see *NNM* 147, nos. 1540–1558-obv. lion; 1559–1564-obv. cross.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

THE MAĞARACIK HOARD OF "HELMET" COINS OF BOHEMUND III OF ANTIOCH

(PLATES XXIV–XXVII)

D. M. METCALF

The billon deniers of the Crusading princes of Antioch from ca. 1163 to 1268 have as their obverse design a profile bust of the prince in a close-fitting helmet with nasal, and chain mail. The inscription is BOAMVNDVS, for Bohemund III (1149–1201), IV (1201–33), V (1233–51), or VI (1251–68), or RVPINVS, for Raymond-Rupin (1216–19). The coins in the name of Bohemund have been classified by Allen into two groups.[1] In the main series, which he divides into types 1 to 6, chiefly on the basis of variation in the letter forms, the chain mail is represented by crescents pointing upward. A subsidiary series, divided similarly into Types 1* to 3*, has the crescents pointing downward. On the coins of Raymond-Rupin the crescents of the chain mail point upward; the coins do not, however, correspond very closely in style with any of the nine types of Bohemund. There is also an early variant of Bohemund on which the head faces to the right instead of to the left. The chronology of the series, worked out originally from the Al-Mina hoard of 1936 and from obverse/reverse "mules" linking the types, can now be studied in greater detail from a number of hoards that have become available in the last few years. The age structure of the Aleppo hoard of 1964 gave reason to suspect that type 5 was in fact very early, and this was confirmed by the occurrence of 5/1 "mules" in the Ras Shamra hoard of 1966; the supposed 4/5 "mule" from Al-Mina can now be discounted on grounds of style as a coin belonging with those signed RVPINVS.[2]

Interpreting the relative proportions of different types in the various hoards is not straightforward. The age structure of both the

[1] D. F. Allen, "Coins of Antioch, etc., from Al-Mina," *NC* 1937, pp. 200–10.
[2] D. M. Metcalf, "Billon Coinage of the Crusading Principality of Antioch," *NC* 1969, pp. 247–67. Metcalf, "Coins of Lucca, Valence, and Antioch: Some New Hoards and Stray Finds from the Time of the Crusades," *HBN* 1969 (in press). The present article complements these two.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Aleppo and the Ras Shamra finds is problematic: it seems that they are composite hoards, made up of sums of money set aside at different times. The "bare head" deniers (ca. 1149–63)[3] in Ras Shamra are not representative of all the varieties of that type, and may therefore be presumed to reflect a sum of money withdrawn from circulation at an intermediate date during the currency of the type. Similarly, the large number of specimens of type 1, when set against the single examples of types 3* and 6, suggest that the latter, and probably also the 21 coins of types 3 and 4, were added to a savings hoard originally concealed during the issue of type 1. It is true that many

	Aleppo	*Ras Shamra*	*Mağaracik*	*"Subak"*	*Al-Mina*
Head to right	1	2	1	0	0
Type 5	3	10	14	2	3
Type 1	8	69	97	4	3
Type 2	0	0	14	0	2
Type 3	1	10	197	3	1
Type 4	1	11	22	1	3
Types 1* to 3*	1	1	2	3	5
"4/5 mules" and Raymond-Rupin	(4)	0	1	5	3
Type 6	0	1	0	5	15

Numbers of specimens of the main types in certain hoards. "Mules" are included under the later type. Note that only 15 out of 79 "helmet" coins in the Aleppo hoard were seen, but that there were said to have been 4 (among 79) of Raymond-Rupin.

coins of earlier types were still in use after the introduction of type 6, as may be judged from a hoard which was made available to me for study by Mr. Carl Subak[4] and the Al-Mina hoard; but the composition of the currency bore little resemblance to the proportions of the different types in the Ras Shamra hoard. Only a selection of

[3] The "bare head" series is classified in *NC* 1969 (see note 2 above) and *HBN* 1969 (where some additional varieties are taken into account).
[4] The hoard is now dispersed, see *NC* 1969, p. 260, K.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

coins from the Aleppo hoard has been studied. If they are a representative sample, the pattern is much the same as in Ras Shamra: "bare head" deniers, and "helmet" coins mainly of types 5 and 1, to which a few later specimens including Types 1*–3* and coins of Raymond-Rupin have been added.[5]

The Samos hoard, concealed ca. 1182, contained a stray specimen of type 3, and showed that the "helmet" coins, traditionally attributed to Bohemund IV, were introduced by Bohemund III.[6] They may have replaced the "bare head" deniers in 1163, when the young prince was installed.[7] The coins of Raymond-Rupin almost certainly belong to the years 1216–19;[8] and Types 1* to 3* are of approximately the same date. There was a fresh specimen of type 3* in the Tripolis hoard, concealed ca. 1220,[9] but that, too, may have a complex age structure, with an element in its composition dating from ca. 1190–1200. On the basis of the evidence currently available, then, it seems likely that Types 1* to 3* can be assigned to the period ca. 1200–20. Type 6 may provisionally be assigned to the period ca. 1230–68 (perhaps it was introduced by Bohemund V following his accession in 1233 as prince of Antioch and count of Tripoli). The Ras Shamra, "Subak," and Al-Mina hoards, which included type 6, will thus have been concealed after ca. 1230. Ras Shamra seems to favor a relatively early date for its introduction, but the reduced weight standard of type 6, and the worn condition of, for example, the coins of Raymond-Rupin in the "Subak" hoard would make it difficult to push the origins of the type back earlier than about 1225. The Aleppo hoard is not known to have contained type 6, and it *may* be as early as 1220. Thus, both it and the Ras Shamra hoard included blocks of "bare head" coins which were 60 to 80 years old and yet were in quite good condition.

[5] *HBN* 1969.
[6] J. Duplessy and D. M. Metcalf, "Le trésor de Samos et la circulation monétaire en Orient Latin aux XII^e et XIII^e siècles," *RBN* 1962, pp. 173–207.
[7] *NC* 1969, p. 256.
[8] See P. Z. Bedoukian, "A Unique Billon of Levon I of Cilician Armenia and its Historical Significance" *NC* 1967, pp. 189–97, at pp. 193 and 195.
[9] D. H. Cox, *The Tripolis Hoard of French Seignorial and Crusader's Coins*, *NNM* 59 (New York, 1933), pl. VIII, 4. The other two "helmet" coins in the hoard were not described in sufficient detail for their types to be identified. For the dating of the Tripolis hoard, see also *RBN* 1962, pp. 173–207.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Types 5, 1, 2, 3, and probably also 4 have to be fitted into the period before ca. 1185. As a general explanation both for the marked decline in mint output in the last quarter of the century, and for the complex age structure of the hoards, one may point to Saladin's sweeping military victories of 1187–88. In 1174 Nur al-Din had died, and Saladin had entered Damascus. He was then able to press the Franks both from Egypt and from the northeast. Baldwin IV of Jerusalem had sufficient skill to contain the threat for a time, but defeat soon followed when the affairs of the kingdom passed into the hands of Guy de Lusignan. In April 1187, the Frankish army (including 50 knights from Antioch) was annihilated at Hattin, and the king and all the nobility were taken prisoner. Thereafter, in 1187 and 1188, Saladin captured stronghold after stronghold, until he held the whole territory of the kingdom of Jerusalem with the exception of Tyre; in the principality of Antioch the only important places which remained in Frankish control were the city of Antioch itself and the castles of Marqab and Qusair. The decline in the issue of "helmet" deniers may plausibly be associated with the events of 1187–88.[10] The port of Latakia (about 12 km. south of Ras Shamra) was not retaken by the Franks until 1200. The first two decades of the 13th century were again marked by insecurity in northern Syria, with all its economic consequences for the region, because of the struggle for Antioch by the rival claimants Raymond-Rupin and Bohemund IV.

Was the issue of type 4 prolonged after 1188? Had it indeed begun then? How sure can one be, even, that types 2, 3, and 4 were issued successively in that order? Two more specimens of Allen's 1/2 mule in the Ras Shamra hoard have A's ornamented with annulets on the reverse, as does the coin in the British Museum; they seem to be a variant of type 1 rather than a true mule. Their general style is close to that of type 5, and they probably belong early in the sequence of type 1. The hoard evidence has until now offered only very weak answers to the unresolved questions about types 2 to 4. Type 2 is absent from Ras Shamra, where types 3 and 4 are present in roughly equal proportions: this may reflect a sum of money set aside during

[10] *HBN* 1969 and references cited there.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

or soon after the issue of type 4. One cannot, however, build anything on such a speculative conclusion. In the other hoards tabulated above (Aleppo, "Subak" and Al Mina), the numbers of types 2, 3, and 4 are too small to be significant, and the dates of deposit are in any case much later than the 1180's. This rehearsal of the deficiencies in the evidence relating to types 2, 3, and 4 should help to make clear the special interest of the Mağaracik hoard.

Mağaracik is a little village on the coast near Antioch, situated some 7½ km. north of the mouth of the River Asi (the classical Orontes). The site of the discovery was thus a short distance to the north of Seleucia Pieria, which, renamed Port St. Simeon, was the seaport for Antioch in the time of the Frankish principality. The hoard passed from its original finders to an owner who recorded its provenance in the following terms in July 1962: "... acheté à Souedie (Seleucie) du village de Maaradjik 353 pieces croisades argent trouvées dans ce village en mai 1962." Later, the hoard was acquired by Dr. Paul Bedoukian who, before allowing it to be dispersed, made a full set of aluminium foil impressions, by the method which he has described in *ANSMN* 11.[11]

In May 1969, I counted 349 impressions, of which one was a duplicate; thus 348 coins are catalogued here. All except 3 of them are of types 1 to 5. The majority were of type 3 (197), with relatively few of type 4 (22). There were two specimens of the irregular series, showing early features, and one of the "4/5 mules," which are inscribed BOAMVNDVS but which are related by style to the RVPINVS coins. Irregular issues are relatively numerous in the "Subak" and Al-Mina hoards (see table above), and also in the Al-Mina site-finds, and their minimal representation in the Mağaracik hoard requires some explanation. One's first idea is of a hoard concealed soon after the irregular coins began to appear in circulation. The age structure seems to be straightforward (no "bare head" coins, 1 early variant, 14 of type 5, 97 of type 1), with type 2 showing

[11] *ANSMN* 11, pp. 333–35. I should like to record my gratitude to Dr. Bedoukian for his kindness in offering to send me the foil impressions of the Mağaracik hoard to study. Miss O. Rennie very skillfully made silicone rubber impressions, and from them plaster casts, of the specimens selected for illustration.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

up as a relatively small scale issue (14 specimens). The scarcity of type 1c among the coins of type 1 is closely in line with the evidence from Ras Shamra, and helps to demonstrate the complex age structure of the Aleppo hoard, in which type 1c was common. The proportion of type 4 to type 3 might indicate that the hoard was withdrawn from circulation at a moment early in the issue of type 4, but the statistics of further finds will be needed to determine if this is so.

The principal contribution which the Mağaracik hoard can make to our knowledge of the Antiochene series is to offer the proof that types 2, 3, and 4 can be distinguished from each other on grounds of general style, as regards both their obverses and reverses. The formal differences between them in Allen's classification are purely inscriptional. All three share the letter-form 𐤇, which does not occur elsewhere in the regular series and which thus marks them off as a group, and shows that together they are the product of one particular period in the work of the Antioch mint. The letters representing H, M, and N are single-barred in type 2, but double-barred in types 3 and 4. Types 2 and 3 have the mark 𐤏 added on the reverse, but it is not (by definition) found on type 4. Thus far, one might legitimately ask whether type 4, which seems to be relatively scarce, is anything more than a variant of type 3, from which the mark 𐤏 has been omitted out of carelessness or indifference. The statistics from an assemblage of hoards, such as has been set out in the table above, ought in principle to point to the answer to this question, but the available evidence is inconclusive. There is, however, one further detail of the letter forms which tends to show that the types are distinct issues. The bars of the letters H, M, and N are sometimes ornamented with dots, thus: 𐤇, 𐤍 𐤇, 𐤇, etc. Because of weak or uneven striking it is usually impossible to be sure of every letter form on a particular coin. Often the ornamental dots, and the bars of the letters as well, are so faint as to be almost indistinguishable. A careful study of the Mağaracik hoard failed to bring to light any specimens to contradict the following generalizations. In type 2 the letters are ornamented with dots (except perhaps on no. 122 in the catalogue below); in type 3 the great majority of the coins have ornamented letters, but there are some that are

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

definitely unornamented; in type 4 the letters are unornamented. So far as the inscriptions are concerned, therefore, type 4 could overlap only a small part of the sequence of type 3. Style rules out even this possibility. The hoard shows, again, that type 2 is struck in a distinctive, coarse style. The bust has a rather large head with a prominent nasal, in comparison with type 3. The crescent to the left of the bust is placed high up in the field, at about the level of the rim of the helmet, whereas in type 3 it is about at the level of the bottom of the nasal. Nos. 114 and 130 are the only coins that contradict this observation. On the reverse the crescent is large and deeply rounded on type 2, as it is on type 1; on type 3 it is variable, but less deeply rounded. On type 4 the crescents on both obverse and reverse are distinctly smaller than on type 3. The stylistic progression, which supports the accepted order of types 2, 3, and 4, is summarized in

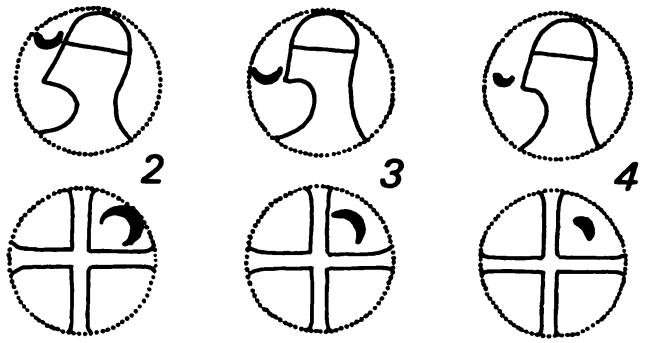


FIG. 1

Fig. 1. The relative chronology of the types, then, seems secure, although it must be pointed out that there are a few specimens which combine the characteristics of types 2 and 3 in ways that are puzzling. Their significance for the classification of the series is not obvious. Nos. 127 and 128 apparently mule type 3 obverses with type 2 reverses: these are "mules the wrong way round," as it was normally an old obverse die that was used with a new reverse die when the type had just been changed. No. 129 combines features that are characteristic of types 1, 2 and 3. Nos. 130–31 are less exceptional. Care has been taken to illustrate all the erratic coins that were noticed, so that they should be available for comparison with any specimens that may turn up in the future.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The detailed listing of the coins of type 3 in the hoard proved difficult, as no clear-cut differences of style or detail could be found among the 197 specimens. On no. 170 the crescent and star have been omitted from the obverse die, no doubt by oversight, and on no. 171 the crescent on the reverse has been placed in the upper left angle of the cross instead of the upper right angle. In the early variety with head facing right this would count as a variable, "experimental" detail, but here it seems to be merely an accident. Mistakes such as these are surprisingly infrequent. The illustrations are intended to show, from well struck specimens, the range of style in type 3, which is not very great. Some coins have large dots on the ornamented letters, while others have very small dots. The elongated letters on nos. 261 ff. may signify no more than that the die cutter had slightly misjudged the spacing of the inscription. The small proportion of coins on which the letters **N**, **H** are definitely unornamented (nos. 308 ff.) do not seem to be distinctive in their general style.

Although the Mağaracik hoard does not by itself offer any firm view of the absolute chronology of types 2 to 4, the straightforward reading is that type 4 is under-represented and that for one reason or another not much of it had reached the currency from which the hoard was withdrawn. The "4/5 mule," it will be argued below, should be dated to 1216. But the conclusion that type 4 was introduced ca. 1210 does not commend itself. Perhaps one should fall back again on the theory that the "mule" and the two specimens of Types 1*–3* were late additions to a sum that had been hidden, or carried away from Syria, in the face of the troubles of 1187–88.

The coins of Raymond-Rupin exhibit one of those little tricks of style which are useful for the numismatic interpretation of a series precisely because they are without significance in the design. When the die cutter had outlined the neck and shoulders of the helmeted bust with two spreading curves, he had to fill in the resultant triangular space with little crescents to represent the chain mail. Some hesitation can be seen in the variety with head facing right, where annulets are occasionally used instead of crescents, but the method of infilling quickly became a settled convention. The die cutter made a column of crescents following the curve of the back

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of the neck (see Fig. 2a), then a second column running parallel to the first (Fig. 2b). Sometimes there was space for a shorter third

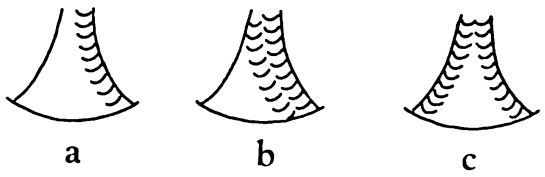


FIG. 2

column, still running parallel. There then remained only a little space in one corner, to be filled in with three or four crescents. This technique is used with the utmost regularity throughout the main series. The die cutter of many (but not all) of the RVPINVS coins worked differently. He made columns of crescents following *both* curves (Fig. 2c), and then filled up the space left in the middle. A "4/5 mule," which is republished here[12] (see PLATE XXVIII, A) has the chain mail cut in the manner appropriate to, and otherwise restricted to, RVPINVS coins. Its attribution does not rest on this detail alone, as the die can be matched by an extremely similar one signed RVPINVS (*NC* 1969, no. 40). There can be no question that both the obverse and the reverse of the "4/5 mule" from the Mağaracik hoard (PLATE XXVIII, 348) are the work of the same hand. Nor can one doubt that the dies are early and "experimental" in character. The infilling with chain mail is inept. The spelling **BOHNVDHV:S•** is blundered, and dots are added in the way that became usual in the (shorter) inscription **RVPINVS**. Of the letter forms used on the reverse, the **H** is absolutely characteristic. The **O** can be matched on *NC* 1969, no. 39. But the careful **N** is irregular. The Mağaracik "4/5 mule," then, is clearly a highly interesting and important coin, which stands at the head of the RVPINVS series, or at least of that part of it with chain mail as shown in fig. 2c. The dating of Raymond-Rupin's issues to 1216–19 seems secure, and the "mule" should accordingly be assigned to the period immediately following his capture of Antioch in February 1216. The newly appointed workers at the mint quickly began to produce deniers for Raymond-Rupin exactly like those which had been familiar for a generation or more;

[12] *NC* 1969, no. 39. The coin is in the Ashmolean Museum.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

it was only after they had begun production that the order was given to substitute the name RVPINVS for the traditional BOAMVNDVS. Numerous examples could be adduced of mediaeval coinages on which the name of a ruler was allowed to stand, often for decades, by his successor of a different name. Raymond-Rupin may have waited a short time until he felt secure in his control of Antioch before causing his own name to be placed on the coinage. The concealment of the Mağaracik hoard will have been not earlier than the spring of 1216.

The two coins of the irregular series 1*–3* cannot be dated with any confidence at present. Other specimens of type 3* show a consistent and recognizable style, to which these two conform. Characteristic details include a prominent "seriffed" nasal and a "chin-strap," and on the reverse, a thick, almost unseriffed cross and a rather large, neat semicircular crescent. Allen's types 1* and 2* are exceptional and, until a denser representation of dies has been gathered up, it is not clear whether they deserve to be considered as substantive types. Probably they do not. No. 346 below, that is to say, may turn out to stand quite early in the irregular series 1*–3*: the crescent on the obverse points downward, as on Allen's type 1* (an "experimental" detail?), and the chain mail is sketchy. On no. 347, the letters H and I on the reverse are joined into a single symbol.

CATALOGUE

An asterisk prefixed to the catalogue number indicates that the coin is illustrated on the accompanying plates.

Head to Right

*1. *Obv.*: ✠BOHNVHDVS The die is similar to *Mélanges de num.* I (1874–5), p. 363, no. 1 and to *NC* 1969, no. 1. *Rev.*: ✠HNTIOCHIH The crescent is in the *first* quarter, but points inward (cf. *HBN* 1969, no. 1); thick cross; the final A is double-barred.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

There are now seven published specimens of this variety, and all are from different dies (see *NC* 1969, p. 261 and *HBN* 1969, nos. 1–2.)[13] Their style is recognizably related. They exhibit many "experimental" details, such as the treatment of the neck and the positioning of the crescent on the reverse.

Type 5

Variety reading ✠BOHMVCNVS

*2. *Obv.*: Blundered inscription: ✠BOHINVCNVS.
Rev.: Normal for type 5.

3–5. *Obv.*: with N for M.

Note that *HBN* 1969, nos. 5–6 have N on the reverse.

Normal varieties

*6–7. Normal inscriptions.

*8. *Obv.*: ✠BOHMVNDVS. *Rev.*: ✠HIITIOCNIH.

9. Similar, but *rev.*: M for II.

*10. *Obv.*: ✠BOHMVNDVS. *Rev.*: ✠HMTIOCNIH.

*11. Near duplicate of no. 10.

*12. Extremely similar, with the chin and neck more sharply defined; cf. no. 13.

*13. Same *obv.* die as no. 12; *rev.*: extremely similar.

14. *Obv.*: ✠BOHHVNDVS. *Rev.*: ✠HIITIOCHIH.

*15. *Obv.*: ✠BOHMVHDVS. Similar in style to no. 14 but with a more spreading bust. *Rev.*: ✠HHTIOCHIH. Note that *HBN* 1969, no. 14, which is a 5/1 mule, also has H.

There are many more variations in the letter forms in type 5 than in any of the other types of the main series. (The same is true of type 1 of the "bare head" coins.) The BOHMVCNVS coins are a regular variety, and they may belong early in the sequence of type 5, but there is no specific evidence that this is so.

[13] The references in *NC* 1969, p. 261, to fig. 6 are reversed.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Type 1

Varieties somewhat in the style of type 5

(The normal inscriptions of type 1 are ✽BOЋHVHDVS; ✽ЋH-TIOCHIЋ.)

(a) *No sigla*

*16. ⊙ on obv. and rev. Broad bust of distinctive style; dot beneath star.
17. Indistinct but extremely similar obverse die; *rev.*: O.
*18–21. Characteristic specimens.

(b) *Dot in reverse inscription,* HI• Ћ; *annulets in* C

*22, *23, *24. Characteristic specimens. Note the large, open crescent on the reverse of this variety.
25–7. Three more, all from different dies. The helmets are not quite so high.
28. Another, with HI• Ћ•.

(c) *Group of annulets in reverse inscription,* TI•O. *Tight crescent*

*29, *30, *31. Three specimens, all from different dies. The obverse dies are extremely similar to those of variety (b).

(d) *Two dots joined by a line in reverse inscription,* TIIO

*32. Characteristic specimen.
33. Another, same reverse die as no. 32, and almost certainly same obverse die, with a little recutting (e.g., on the bar of the Ћ).
34. Similar, but with TI• O. Thicker crescent.

A comparison of the coins chosen for illustration with those of type 5 and of the rest of type 1 will demonstrate that the irregular varieties of type 1 are generally speaking close in style to type 5. The use of sigla breaking the reverse inscription has precedents in the "bare head" coinage. Note that the letter form C seems to be restricted to variety (b) above, and that it does not, so far as can be seen, occur among nos. 35–103 below. In the Ras Shamra hoard, no. 18, variety (c), *may* have C and no. 19 is indistinct; nos. 20–23 are certainly normal, i.e. C; nos. 25 and 27, variety (b), have C, and so does no. 26, which lacks the dot between I and Ћ.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Normal varieties

*35–*38. Characteristic specimens.
39–103. Similar.
*104. *Rev.*: A dot is added on each side of the initial cross (Allen, type 1c).
105–08. Similar.
*109. Similar, but a dot is added on the left side only.
110–12. Similar.

Type 2

(The normal inscriptions are ✠BOHHVHDVS; ✠HHTI•OCIHH. That is, as defined by Allen, except that the letters H, M and N are dotted, rough style, as described in the text above. The crescent on the reverse is even more deeply curved than in type 1.)

*113. *Obv.*: The crescent is compressed into a too small space by the size of the head. The letters M and N are wide and boldly dotted.
Rev.: The crescent is flattened. There are two bold dots in the C.
Unusual and perhaps early dies.
*114. *Obv.*: The crescent is placed low; otherwise the dies are characteristic.
*115–*117. Characteristic specimens.
118–121. Extremely similar dies.
122. The letters M and N on the obv. are apparently unornamented, otherwise extremely similar.
*123. *Obv.*: ✠BOHHVMHVS. Bust very weakly struck.
Rev.: Less deeply curved crescent. Cf. no. 124.
*124. *Rev.*: Less deeply curved crescent; near-duplicate of no. 123.
*125. Similar to no. 124; cf. no. 126.
*126. Same obv. die as no. 125; *rev.*: normal crescent.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Type 3

Dies with earlier characteristics

*127. *Obv.*: As type 3. *Rev.*: Single-barred N and H. Compare the style with that of no. 125. Apparently a normal type 2 die.

*128. *Obv.*: As type 3. *Rev.*: Deeply curved crescent, single-barred N and H. Apparently a normal type 2 die.

*129. *Obv.*: ✠BOHHVCNVS. Bust more in the style of type 1? The crescent is placed high.
Rev.: Double-barred, ornamented H; dotted O, and ornamented C. A type 3 die?

*130. As type 3, but crescent on obv. placed high.

*131. As type 3, and the N on the rev. is apparently normal, but the H is certainly single-barred.

132. Very similar to no. 131, but the style is more like that of type 2 (rougher work, and a deeper crescent on the rev.)

133. As type 3, but single-barred H throughout. Similar in style to no. 131.

Normal varieties

(The normal inscriptions are ✠BOHHVHDVS; ✠HHTI•O-CHIH.)

*134–*142. Within the range of style exhibited by type 3, these specimens are relatively rough, and are more like type 2.

143–62. Similar.

*163–*169. Specimens in the more normal style of type 3.

*170. *Obv.*: The crescent and star are omitted.

*171. *Rev.*: The crescent is placed in the upper left quarter of the cross.

172–260. Similar to nos. 163–169.

*261–*262. Elongated letters H, M, and N.

*263–*264. Similar, with thicker crescents on the reverse.

265–305. Similar to nos. 261–4.

*306–*307. Two specimens on which the mark • is hardly visible. (If these were classified as type 4, they would conflict with the characteristic style of that type.)

*308–*310. The letters H, M and N are unornamented.

311–323. Similar.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Type 4

(The normal inscriptions are ✠BOHNVHDVS; ✠HNTIOCHIH.)

*324–*331. Characteristic specimens.
332–43. Similar.
*344–*345. Rougher style.

Type 3*

*346. *Obv.*: ✠BOHIIVIIDVS. The crescent points downward. The chain mail is sketchy.
Rev.: ✠HITIOCIIIH

*347. *Obv.*: ✠BOHIIVIIDVS. *Rev.*: ✠HITIOCNNH

RUPINVS Series

In the name of Bohemund

*348. *Obv.*: ✠BOHNVDHV:S•. *Rev.*: ✠HNTIΘCIIIH
Cf. the related coin, Plate XXVII, A.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

BĀLIS: A NEW ṬŪLŪNID MINT

(PLATE XXVIII) N. M. LOWICK

In the catalogue of Ṭūlūnid coins included by Oleg Grabar in his monograph on the series,[1] only a dozen specimens in silver are listed, from the mints of Miṣr, Dimishq and al-Rāfiqah.[2] While travelling in Iran recently it was my good fortune to obtain, in the Isfahan bazaar, a dirhem of Khumārawayh b. Aḥmad struck at Bālis, a mint not hitherto attested either for the Ṭūlūnids or for any other Islamic dynasty. The coin has now passed into the British Museum collection. Its description, which is similar in most respects to that of other coins of the same ruler, is as follows:

Khumārawayh b. Aḥmad

Æ 26 mm. 2.89 gr. Bālis, 281 A.H./A.D. 894–895 (PLATE XXVIII)

Obv.: لا اله الا
الله وحده
لا شريك له

Rev.: له
محمد
رسول
الله
المعتضد بالله
خمارويه بن احمد

Inner margin: بسم الله ضرب هذا الدرهم ببالس سنة احدى وثمانين ومائتين

Margin: Qur'ān IX, 33.

Outer margin: Qur'ān XXX, 3–4.

Bālis (ancient Barbalissos), a port on the west bank of the Euphrates, lay roughly midway between Aleppo and Raqqah on the trade route from Antioch to Baghdad. Owing to its advantageous position at the intersection of land and river highways it enjoyed both commercial and agricultural prosperity under the Caliphate, but

[1] *The Coinage of the Ṭūlūnids*, *NNM* 139 (New York, 1957).
[2] Not counting no. 82, listed as gold, but in fact silver. The Johnston coins are now in the British Museum.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

there is evidence that it began to decline in Ḥamdānid times and it disappears from history after the Mongol invasion.[3]

Grabar has argued[4] that most of the Ṭūlūnid mints can be shown to correspond to capitals of *junūd*. Administratively, Bālis belonged first to the *jund* of Qinnasrīn and later (from the reign of al-Rashīd onward) to al-'Awāṣim. It was, however, never the capital of either. Moreover, as Grabar points out, in the Ṭūlūnid period both Qinnasrīn and al-'Awāṣim were represented by mints located at their respective capitals, Aleppo and Antioch. There is, however, a different reason why Bālis should have served as a mint, and one that does not conflict with Grabar's interpretation of the Ṭūlūnid mint-network. Some fifty miles to its east, in Mesopotamia, lay another Ṭūlūnid mint, al-Rāfiqah. The role of the latter, Grabar believes, was not administrative but political or strategic.[5] As the Ṭūlūnid ruler's easternmost outpost it was doubtless connected with his claim on the person of the Caliph and with his opposition to the Caliph's champion, al-Muwaffaq. Now in 279 A.H., under an agreement with the Caliph, the territories of Khumārawayh b. Aḥmad were limited to the areas west of the Euphrates. Accordingly, the Ṭūlūnid issues of al-Rāfiqah come to an end in this year.[6] It is probable, however, that the Ṭūlūnid continued to maintain troops on his eastern frontier, in view of the hostilities between himself and the Caliph's supporters prior to the agreement. Forces previously garrisoned at al-Rāfiqah could conveniently have been moved to the nearby town of Bālis, which not only lay directly on the new frontier but commanded one of the main trade arteries feeding Iraq. If our assumption is correct, then the object of providing Bālis with a mint may have been twofold: to ensure a ready supply of coin for the upkeep of the garrison, and to make propaganda on behalf of the Ṭūlūnid ruler in the lands immediately subject to the Caliph. The discovery of our coin as far afield as Iran lends weight to the latter hypothesis and suggests that the circulation of silver was not impeded by political boundaries.

[3] See J. Sourdel-Thomine, "Bālis," *Encyclopaedia of Islam*[2] Vol. I (1960), pp. 995–996.
[4] *NNM* 139, pp. 72–73.
[5] *NNM* 139, p. 58.
[6] See Grabar's no. 79, a gold coin of al-Rāfiqah dated 279.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE COINAGE OF THE MAMLŪK SULTANS: ADDITIONS AND CORRECTIONS

(PLATES XXVIII–XXXVI)

PAUL BALOG

During the period since the publication of my work, *The Coinage of the Mamlūk Sultans of Egypt and Syria, NS* 12 (New York, 1964), a number of new issues and important new varieties of recorded issues have been brought to my attention, in large part through the generous collaboration of several distinguished scholars and unselfish collectors. It is appropriate at this date, therefore, to publish a supplementary catalogue to *MSES* and, at the same time, to take note of those inevitable errors in the original which fresh knowledge allows us to correct.

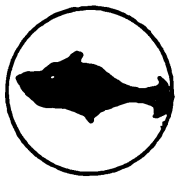
This supplementary record is most important for the new information which the coins supply about the period. There are, for example, issues from reigns hitherto unknown on the coins, such as a gold coin and a silver dirhem from al-Nāṣir Muḥammad's first reign; there have been added coins of sultans never before recorded on the coinage: al-Manṣūr ʿAbdul-ʿĀzīz and al-Ẓāhir Bilbāi. But most surprising of all is a silver dirhem of al-Kāmil Shams al-Dīn Sunqur, governor of Damascus, who had himself elected rebel-sultan of Syria by the Damascus nobles against the lawfully proclaimed ruler of Egypt and Syria, al-Manṣūr Qalā'ūn. Sunqur ruled but a short while, yet the numismatic evidence presented in this study indicates that he considered the right of coinage (*sikka*) as a privilege due him.

The coins listed in the catalogue also add four new heraldic emblems to the long line of Mamlūk blazons published in *MSES*.



This is the first occurrence, on a coin, of al-Ashraf Khalīl's blazon (no. 152B). Both of the heraldic devices displayed are unique on the Mamlūk coinage: a penbox, of which eleven varieties are shown in Mayer, *Saracenic Heraldry*, p. 12; a big fish, probably

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



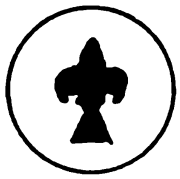
a tuna. The left tip of the penbox is not clear, but the existing part corresponds with Mayer's type 8.

A new heraldic emblem of al-Ẓāhir Khushqadam, a handsome chalice, is represented on *fals* no. 800A. *MSES* lists only a small six-petaled rosette for Khushqadam.



A fleur-de-lis is noted for Al-Ẓāhir Jaqmaq (754C) similar to that of *MSES* 654 (Faraj).

Al-Ashraf Qā'itbāy is represented in *MSES* by four different blazons: a curious six-petaled rosette, a lion passant to left, an eagle walking to right and a checkerboard. no. 845A illustrates a fifth device in the form of a curious fleur-de-lis, standing on a triangular base. Although much cruder in design, it seems to bear some resemblance to the fleur-de-lis chalice on Barqūq's *fulūs* nos. 590–591 and Faraj's copper coin no. 647. One cannot exclude the possibility that no. 845A is an attempt by an incompetent engraver to represent a fleur-de-lis chalice.



THE CATALOGUE

The format and arrangement of this catalogue follows *MSES*. Entry numbers followed by a capital letter represent new issues or varieties and are to be read as directly following the relative number in *MSES*. Entry numbers without appended letters indicate additional information about or corrections of coins described in *MSES*, or record newly discovered examples of rare issues.

In addition to the list of abbreviations published in *MSES*, the following terms used in this catalogue should be noted.

Awad—Dr. Henry Amin Awad collection, Cairo, Egypt.
Berlin—Collection of the Staatl. Münzkabinett, Berlin DDR.
Berman—Ariel Berman collection, Haifa, Israel.
Horovitz—Théodore Horovitz collection, Geneva, Switzerland.
Leuthold—Dr. Enrico Leuthold, Jr. collection, Milan, Italy.
MSES—Paul Balog, *The Coinage of the Mamlūk Sultans of Egypt and Syria, NS* 12 (New York, 1964).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Paris—Reference is made, where applicable, to the contents of three BN hoards containing Mamlūk dirhems which are described in detail in a separate article in *ANSMN* 16.

Additions to the bibliography cited in *MSES* include the following.

Bacharach, Jere L., "A Few Unpublished Dirhems," *ANSMN* 14, 1969, pp. 163–169.

Bacharach, Jere L. and Adon A. Gordus, "Studies on the Fineness of Silver Coins," *JESHO* 1968, pp. 298–317.

Baer, Eva, "The Mamlūk Coins," *Israel Num. Jour.*, Vol. II, 3–4 (1964), pp. 49–55. [14th cent. hoard from Tiberias]

Balog, Paul, "I. A Hoard of Late Mamlūk Copper Coins. II. Observations on the Metrology of the Mamlūk Fals," *NC* 1962, pp. 243–273.

—"History of the Dirhem in Egypt from the Fāṭimid Conquest until the Collapse of the Mamlūk Empire," *RN* 1961, pp. 109–146.

—"Three Hoards of Mamlūk Coins," *ANSMN* 16 (1970), pp. 173–178.

Erel, Şerafettin, *Nâdir Birkaç Sikke*, Part 1 (Istanbul, 1963); Part 2 (1967).

Leuthold, Enrico, Jr., "Un dinaro coniato nel primo anno del terzo regno di Mohammed ibn Qalaun," *SM* 1968, pp. 122–124.

— "Monete cufiche dell' I.R. Museo di Milano," *Notizie dal Chiostro del Monastero Maggiore. Rassegna di Studi del Civico Museo Arch. e del Civico gale. Num. di Milano*, 1968 (publ. 1970), I–II, p. 61.

Matsson, G. Olaf, "A Silver Dirhem of the Egyptian Mamlūk Dynasty, with some Observations on Mamlūk Heraldic Devices," *Numismatiska Meddelanden* 1965, pp. 26–28.

Miles, George C., "A Mamlūk Hoard of Ḥamāh," *ANSMN* 11, 1964, pp. 307–309.

Mitchell, Helen W., "Notes on Some Mamlūk Dirhems," *ANSMN* 16 (1970), pp. 179–184.

BAHRI MAMLŪKS

SHAJAR AL-DURR

648 H./A.D. 1250

1. *Gold.* Paris (22, 4.04), a well-preserved specimen reported by M. Raoul Curiel.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

2. *Silver*. Awad (2 dirhems, diameters and weights not available).

AL-ASHRAF MUẒAFFAR AL-DĪN ABŪ'L-FATḤ MŪSÂ II
648–650 H./A.D. 1250–1252

3. CAIRO, 649 H., *Gold*. Erel, *Nâdir Sikke*, no. 1 (20, 4.90), second pubished specimen.

4. CAIRO, 650 H., *Gold*. Erel, *Nâdir Sikke*, no. 2 (21, 4.90), second published specimen.

AL-MANṢŪR NŪR AL-DĪN 'ALI
655–657 H./A.D. 1257–1259

18A. CAIRO, 654 H. *Silver*.

As 18.

As 18, but date in the left segment: سنة اربع و

Bacharach, *ANSMN* 14, no. 1 (18, 2.90). According to Bacharach, a 654 H. reverse die of Aybak has been used either in error, or more probably, as an emergency for a hurried issue for the new sultan.

20A. CAIRO, 657 H. *Silver*.

As 20.

As 20, but ضرب in the mint formula split between the top and right segments:

T	R
ب بالقاهرة	بسم الله ضر

Bacharach, *ANSMN* 14, no. 2 (21, 2.88).

AL-MUẒAFFAR SAYF AL-DĪN QUṬUZ
657–658 H./A.D. 1259–60

26. *Copper*. Awad (2 specimens).

AL-ẒĀHIR RUKN AL-DĪN BAYBARS I
658–676 H./A.D. 1260–1277

30A. ALEXANDRIA, 664 H., *Gold*.

As 30.

As 30, but date in the marginal legend: سنة اربع وستين

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

BM (24, 5.90). N. M. Lowick, *NC* 1964, p. 364 (review of *MSES*).

31. ALEXANDRIA 667 H., *Gold*. On the L 704 coin, ضرب بالاسكندرية is clear at the reverse top.

AYYŪBID STYLE (NON-HERALDIC)
with Caliph al-Ḥākim

39. DAMASCUS, *Silver*. On the basis of a cast of the Ashmolean Museum specimen, kindly provided by Miss Helen Mitchell, the reading of no. 39 in *MSES* may be emended as follows: Obverse and reverse borders missing (judging from the 39A dirhems, probably consisted of a linear circle in a circle of dots). In this, a linear rectangle of dots on the obverse (16 × 12), and a linear square within a square of dots on the reverse (14 × 14).

Segments: Segments obliterated.

R B L T

... / ... / ... / (بد) مشق سنة

Center: Center:

الملك الظاهر ركن الدنيا





الملك (الظاهر) علم الدنيا و الدين بيبرس

PLATE XXVIII.

The dirhems mentioned by Mayer were not recorded in detail; they may belong under no. 39 or 39A.

AYYŪBID STYLE (NON-HERALDIC)
with religious legend

39A. CAIRO, 658 H., *Silver*.

Border on both sides: linear circle in circle of dots; in this is inscribed a linear square of dots (14 × 14).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Segments:				Segments:			
B	L	T	R	R	B	L	T
...	(رسول الله)	(الله محمد)	لا اله الا	ستاية	...	(سنة ثما)ن و	ضرب بالقاهرة

Center: Center:



الملك الظاهر
ركن الدنيا و الدين
بيبرس

لا اله الا الله
محمد رسول الله
ارسله بالهدى

Bacharach, *ANSMN* 14 no. 3 (20, 2.66); Berman (19, 2.20). PLATE XXVIII.

The date, (65)8 H., is clear on Mr. Berman's coin.

MAMLŪK STYLE (HERALDIC)

with Caliph al-Mustanṣir

Struck with special half-dirhem dies

43A. No mint, no date, *Silver*. As 43 but the reverse marginal legend starts at left.
Paris (14, 1.20).

with Caliph al-Ḥākim

Struck with special dirhem dies

49A. No mint, undated, *Silver*. Border missing on obverse; linear circle in circle of dots on reverse.

(الصالحى)
(السلطان الملك)
الظاهر قسيم امير المومنين

الامام (الحاكم)
ابو العباس (احمد)
امير المومنين

Lion passant to left, full face,
tail drawn between the hind legs.
Paris (22, 3.20).

54A. See below, p. 179.

63A. See below, p. 180.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

64. ḤAMĀH, 666 H., *Silver*. Correction: بن at the end of the third line of the reverse is emended to read احمد.

66A. Mint missing, but doubtless: ḤAMĀH. 66– H., *Silver*.

As 64–66, no circular legend. Lion passant to right; no pellets.

No circular legend.
وستين وستماية
(sic) الامام الحاكم بالله
ابو العباس احمد
امير المومنين

Horovitz coll. (22, 2.80). The only other dirhem of Baybars I with lion passant to right is L. 743 (*MSES* 43b), a half-dirhem.

Title: *al-Malik—with religious legend*

71A. DAMASCUS, 659 H., *Silver*.

As 71.

As 71, but circular legend:

R	B	L	T
وستماية	وخمسين	سنة تسع	ضرب بدمشق

Lion passant, full face.
Bacharach, *ANSMN* 14, no. 5 (22, 2.44).

Title: *al-Sulṭān al-Malik—with religious legend*

77A. CAIRO, 659 H., *Silver*.

As 78.

As 78, but date:

R	B	L	T
وستماية	خمسين	سنة تسع و	ضرب بالقاهرة

Bacharach, *ANSMN* 14, no. 4 (22, 2.72).

with Caliph al-Ḥākim

96A. Mint and date missing, *Copper*. Border missing on both sides. Linear square, in which:

السلطان
الملك الظاهر



الامام
الحاكم ا
مير المومنين

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Lion passant to left.
Berlin (16, 1.58).

with religious legend

96B. CAIRO, date missing, *Copper*. Border on both sides: circular line in circle of dots, in which linear square.

Left segment: بالقا(هرة)

Segments obliterated

Center:

السلطان
الملك الظاهر



Center:

لا اله الا
الله محمد
رسول الله

Lion passant to left.
München (20, 2.257, courtesy of Dr. Peter Jaeckel).

98–99. Weights of Balog specimens (98): 17, 3.18; 16, 2.82; 15, 2.97 and a recently acquired coin: 18, 3.22. The attribution of nos. 98–99 to Damascus is based on Jungfleisch's reading (99). A new examination of his coin, as well as my four specimens, indicates that Damascus is not on the coins. Therefore all should be recorded under "mint and date missing."

102A. No mint, undated, *Copper*. *Var. C*. Border on both sides: circular line in circle of dots.

السلطان
الملك الظاهر



لا اله الا
الله محمد
رسول الله

Lion passant to left.
Berlin (19, 1.36) PLATE XXVIII; München (courtesy of Dr. Peter Jaeckel).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

103A. No mint, undated, *Copper*. Border on both sides: Linear multilobe in circular line; pellets between the two.

ن	Lion passant to left, facing, long
السلطا الملك	tail swept up and forward, with
الظا(هر...)	knot toward the tip.

Berman (20, 3.60) PLATE XXVIII.

AL-MANṢŪR SAYF AL-DĪN QALĀ'ŪN
678–679 H./A.D. 1279–1290

126A. CAIRO, 680 H., *Silver*. *Type B*, as 126, but the circular legend of the reverse ends: سنة ثمانين وستماية
Paris, Hoard II (22, 2.80).

126B. CAIRO, 685 H., *Silver*. *Type B*, as 126, but date:
خمس وثمانين وستماية
Paris, Hoard II (22, 2.75).

126C. CAIRO, 687 H., *Silver*. *Type B*, as 126, but date:
سبع وثمانين وستماية
Paris, Hoard II (21, 2.62).

126D. CAIRO, 688 H., *Silver*. *Type B*, as 126, but date:
ثمان وثمانين وستمايه
Paris, Hoard II (22, 2.80).

133A. See below, p. 180.

135. ḤAMĀH, undated, *Silver*. Border on both sides: circular line. No circular legend.

ص الصالحى ض	لا اله الا الله
السلطان الملك ا	محمد رسول الله
لمنصور سيف الدنيا والدين	ارسله بالهدى
ص قلاون ض	ودين الحق ضرب بحماة

Berman (21, 3.13). See 135A for L. 758.

135A. ḤAMĀH, 68– H., *Silver*. Border on both sides: circular line.

Circular legend:

R	B	L	T
وستماية	وثمانين	...	(ضرب) بحماة

Circular legend:

	B	L
٥ كله ٥	على الدين	٥ ليظهره ٥

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Center:

السلطان الملك
سيف الدين قلاون

Center:

لا اله الا الله
محمد رسول الله
ارسله بالهدى

L. 758 (cited in *MSES* as 135); Paris, Hoard II (21, 3.46; 20, 3.44; 20, 3.06; 20, 1.70).

135B. ḤAMĀH, $6\frac{7}{8}$ H., *Silver*. Border on both sides: circular line.

No circular legend.

(السلط)ان (الملك)
(المنصـ)ور سيف الد(ين)
(قلا)ون قسيم امير المو(منين)
ضرب بحماة سنة ثما(ن)
(و...) وستماية

لا اله الا الله
محمد رسول الله ارسله
بالهدى ودين الحق

Paris (20. 2.02).

135C. ḤAMĀH, 689 H., *Silver*. *MSES*, p. 394 gives a brief description of a hoard of 305 dirhems of Qalā'ūn struck in Ḥamāh in 689 H. Dr. George C. Miles subsequently published a detailed account of the hoard in *ANSMN* 11, pp. 307–309. The variety of this hoard is reproduced here as the third Ḥamāh variety in order to facilitate comparison of the different legends.

Marginal legend:

R	B	L	T
o وستماية	o وثمانين	سنة تسعة	ضرب بحماة

Center:

السلطان الملك
سيف
المنصور الدنيا
والدين قلاون

Marginal legend:

R	B	L	T
o كله	على الدين	o ليظهره o	ودين الحق o

Center:

لا اله الا الله
محمد رسول الله
ارسله بالهدى

137A. See below, p. 180.

138A. No mint, undated, *Copper*. Border on both sides: circular line. In it, linear square in square of dots on obverse; linear oblong of dots on reverse.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

السلطان
الملك المنصور
سيف

الدنيا والد
ين قلاون

Paris; Berman.

139A. No mint, undated, *Copper*. Border on both sides: circle of dots. Bold, large naskhy characters.

صا
قلاون
المنصور

قلاون
السلطان

Berlin (17, 1.18) PLATE XXVIII.
The small صا at the obverse top is unexplained.

139B. Mint missing, probably undated, *Copper*. Border missing on both sides.

Field divided into 1/3–2/3 segments by horizontal line.

السلطان ا
لملك المنصور
سيف



. . . . . .
الدنيا والدين
قلاون

Balog (17, 0.82).

140A. CAIRO, undated, *Copper*. Border on both sides: circular line in circle of dots.

ضرب بالقاهرة
السلطان الملك
سيف
المنصور الدنيا و
الدين قلاون

بالهدى
لا اله الا الله
محمد رسول الله
ارسله

Paris, Hoard I (20, 2.85). PLATE XXVIII.

141A. DAMASCUS, 680 H., *Copper*. Border on both sides: circle of small dots: Field on both sides divided by flexed cable to left, with small dots in the spaces.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

الملك (المنصور)
سيف الدنيا و الدين
قلاون

ضرب بدمشق
ثمانين و
.....

Berman (17, 1.72). PLATE XXVIII.

The date, 680 H., is not certain. A specimen of this issue, listed in *MSES* as uncertain Mamlūk (no. 907), should be transferred here. It is, without doubt, a coin of Qalā'ūn.



141B. DAMASCUS, $68\frac{7}{8}$ H., *Copper*.

As 141A.

As 141A. but date:

... سع ثمانين و...



Berman (15, 1.05). PLATE XXVIII.

141C. No mint, undated, *Copper*.

Field on both sides divided by rigid cable to right.

• الملك
المنصور

• السلطان

Berman (16, 1.15). PLATE XXVIII.

AL-KĀMIL SHAMS AL-DĪN SUNQUR
679 H./A.D. 1280

Sunqur al-Ashqar (The Blonde) al-Rūmi had himself elected Sulṭān in Damascus on the first day of Muḥarram 679 H. and he was named in the *khuṭba* the next day. He even sent

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

emissaries to different cities in Syria to obtain support. Qalā'ūn quickly dispatched an army which defeated Sunqur's troops encamped in Gazah. Nevertheless, Sunqur, who fled Ramleh, succeeded in winning over some of the Egyptian Mamlūk amīrs and recruited considerable forces from Aleppo, Ḥamāh and the mountainous country around Ba'lbak. On Muḥarram 19, 679 H., the two armies met at Hasūrah which again resulted in the rout of Sunqur's forces.

Sunqur retreated to Raḥbah from where, hoping that he would be restored to his sultanate, he sent letters to Abaga, the Ilkhānid ruler of Persia, inviting him to invade Syria. On Rabi' I, 4, 679 H., Sunqur surrendered to Qalā'ūn, being received with full honors. All the cities, towns and fortresses which Sunqur claimed were bestowed upon him. When the armed clash with the Mongols finally took place, Sunqur stood by Qalā'ūn faithfully and with courage.

Although Sunqur is well known in the literature, no coins of his were known until now with this recording of a silver dirhem in the valuable collection of Mr. Ariel Berman of Haifa, Israel.

141D. DAMASCUS, 67(9) H., *Silver*.

Border missing.
No circular legend.

الصالحى
الظاهرا الملك
الكامل شمس الدنيا
(و) الدين سنقر قسيم
امير المومنين

Border: circular line.
Counter-clockwise circular legend:

R	B	L	T
وستماية	وسبعين	(سنة تسع)	ضرب بدمشق

Center:

لا اله الا الله
محمد رسول الله
ارسله بالهدى

Berman (20, 2.18). PLATE XXIX. (22, 2.51).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-ASHRAF ṢALĀḤ AL-DĪN KHALĪL
689–693 H./A.D. 1290–1293

146A. ALEXANDRIA, 690 H., *Gold.*

Border on both sides: circular line, in which counter-clockwise marginal legend:

ضرب هذا الدينار المبارك بثغر الاسكندرية المحروسة سنة تسعين وستماية من الهجرة النبوية

بسم الله الرحمن الرحيم لا اله الا الله محمد رسول الله ارسله بالهدى ودين الحق ليظهره على الدين كله

On both sides, field in circular line: كله

لا اله الا الله محمد رسول الله ارسله بالهدى ودين الحق ليظره على الدين

قلاون السلطان الملك الاشرف صلاح الدين ناصر الملة المحمدية محى الدولة العباسية خليل

G. Gautier coll., Paris. (29, 5.69) PLATE XXIX. Cast provided by courtesy of M. Raoul Curiel.

The prefix ثغر, fortified frontier place or military harbor, is recorded on three Mamlūk dinars: *MSES* 147, Khalil, Alexandria, 692 H.; *MSES* 634, Faraj, Alexandria, two dinars, 810 H. Our no. 146A is specified not only as ثغر الاسكندرية, but also as "the guarded," المحروسة, which is the first occurrence of this epithet for the Alexandria mint. It is known also for Cairo and Damascus.

149. In *MSES* الدولة has been erroneously repeated in line 4 of the obverse inscription.

149A. CAIRO, date missing, *Silver half dirhem.*

As 149.

As 149, but ornaments:

رسول الله

Paris, Hoard II.

150. CAIRO, date missing, *Silver half dirhem.*

As 150.

As 150, but top:

ضرب بالقاهرة

Paris, Hoard II. This coin confirms the attribution of no. 150 to Cairo.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

152A. ḤAMĀH, undated, *Silver*.

Border on both sides: circular line in circle of dots.

No circular legend.

ضرب بحماة
السلطان الملك
الاشرف صلاح
الدين خليل

Counter-clockwise circular legend:

R	B	L	T
٥ كله ٥	على الدين	٥ ليظهره ٥	(ودين الحق)

Center: لا اله الا الله
محمد رسول الله
ارسله بالهدى

Paris, Hoard II (20, 2.96; 20, 2.75; 20, 2.51; 20, 2.14; 20, 2.11).

Heraldic: *Tuna/Penbox*

152B. No mint, undated, *Copper*.

Border on both sides: circular line.

Tuna to left, between two horizontal lines of legend, slightly curved to accomodate the space between the fish and the border.

Penbox (left tip not clear) between two horizontal lines of legend.

Top: السلطان
Bottom:
.... الملك





Top: Obliterated
Bottom: خليل

Paris (21, 3.30). PLATE XXIX. See p. 113 for discussion of the heraldic devices.

153. DAMASCUS, undated, *Copper*. Border on both sides: circle of large dots. Field divided by horizontal line on obverse.

الملك الاشرف
ح
صلا الدنيا



والدين خليل
ابن قلاون
دمشق

Balog (17, 1.67). On this specimen, the name of the mint is clearly legible.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

154A. Mint missing, undated, *Copper*. Border missing on both sides.

. . . .
. . . .
(وا)لدين خليل
••o••••o••

. . . .
. . . . (بن)
الملك (المنصور)
قلاون

Berman (12, 1.27). PLATE XXIX.

AL-NĀṢIR NĀṢIR AL-DĪN MUḤAMMAD

1ST REIGN 693–694 H./A.D. 1293–1294

154B. CAIRO, 693 H., *Gold*. Border on both sides: circular line.

No circular legend.

ضرب بالقاهرة
صر
السلطان الملك النا
ناصر الدنيا والدين محمد ا(بن)
الملك المنصور
سنة تسعين
ثلاث ستماية

Illegible traces of counter-clockwise circular legend.
Inner circle, in which:

الله
وما النصر الا عند
من
لا اله الا الله محمد
رسول الله ارسله
بالهدى ودين
(الحق)

Paris (24, 7.88). PLATE XXIX.

154C. CAIRO, 693 H., *Silver*. Border on both sides: circular line in circle of dots.

No circular legend.

Counter-clockwise circular legend:

R	B	L	T
وستماية	وتسعين	سنة ثلاث	ضرب بالقاهرة

o قلاون o
السلطان الملك
الناصر ناصر الدنيا والدين
بن الملك المنصور
o محمد بن o



Center:
لا اله الا الله
محمد رسول الله
الحق
ارسله بالهدى ودين

Berman (21, 2.75). PLATE XXIX. Note that محمد, which should be at the beginning of the 4th line, has slipped to the 5th line.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-ʿĀDIL ZAYN AL-DĪN KITBUGHĀ
694–696 H./A.D. 1294–1296

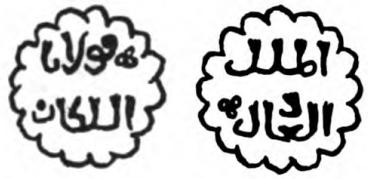
160. DAMASCUS, undated, *Copper*. On the basis of six newly examined specimens of this coin the legends of this issue are corrected to read:

الملك	والدين
العادل	كتبغا
زين الدنيا	ضرب بدمشق

Berman (12, 0.81; 13, 0.87; 15, 1.20; 12, 0.70; 12, 0.65; 12, 0.72). PLATE XXIX.

161A. No mint, undated, *Copper*. Border on both sides: scalloped circle.

مولانا ❀ السلطان



الملك ❀ العال

Awad (17, 2.00; 21, 3.50).

AL-MANṢŪR ḤUSĀM AL-DĪN LĀJĪN
696–698 H./A.D. 1296–1299

164. CAIRO, 69– H., *Silver*.

As 164.

As 164, but counter-clockwise circular legend:

ضرب بالقاهرة .... تسعين وستماية

Awad (21, 3.50).

AL-NĀṢIR NĀṢIR AL-DĪN MUḤAMMAD
2ND REIGN: 698–708 H./A.D. 1299–1309

169A. See below, p. 181.

170A. Mint missing, 708 H., *Silver*. Border missing on both sides. No circular legends.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

لا اله الا الله
(محمد) رسول الله (ارسله)
بالهدى ودين
ثمان وسبعماية

قلاون
السلطان الملك ا
لناصر ناصر الدنيا
والدين محمد بن الملك
(المنصور)

Berlin (22, 2.09). PLATE XXIX. This is the first known silver coin from al-Nāṣir Muḥammad's second reign.

AL-MUẒAFFAR RUKN AL-DĪN BAYBARS II

708–709 H./A.D. 1309–1310

173A. ḤAMĀH, date missing, *Silver*. Border on both sides: circular line in circle of dots.

No circular legend.

امير المومنين
(السلطان الملك)
المظفر ركن (الدنيا و)
الدين ببرس قسيم
ضرب بحماة

Clockwise circular legend:

. . . على الدين . . .

Center:

(لا اله الا الله)
محمد رسول الله
ارسله بالهدى

Berlin (21, 3.18).

The profession of faith formula of the reverse center is continued into the circular legend on 173A whereas on *MSES* no. 173 this area contains the date (and probably the mint). However, it is likely that 173 also should be attributed to Ḥamāh.

175. The München specimen has been reattributed to al-Nāṣir Muḥammad by Dr. Peter Jaeckel.

AL-NĀṢIR NĀṢIR AL-DĪN MUḤAMMAD

3RD REIGN: 709–741 H./A.D. 1310–1341

175A. CAIRO, 709 H., *Gold*. Border on both sides: circular line. Counter-clockwise marginal legend on both sides:

ضرب هذا الدينار بالقاهرة المحروسة
سنة تسع وسبعماية

لا اله الا الله محمد رسول الله ارسله بالهدى
ودين الحق ليظرة

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Center, in double circle:

قلاون
السلطان الملك
الناصر ناصر الدنيا والدين
محمد ابن الملك
المنصور

Center, in double circle:

ضرب بالقاهرة
لا اله الا الله
محمد رسول الله
ارسله بالهدى ودين
الحق

Leuthold, *SM* 1968, pp. 122–124 (24, 7.82—Leuthold specimen). PLATE XXIX.

191A. No mint, 710 H., *Silver*. Border on both sides: circular line in circle of dots.

No circular legend.

الله
وما النصر الا عند
من
السلطان الملك الناصر
ناصر الدنيا والدين محمد
(بن) الملك المنصور

Counter-clockwise circular legend:

R | L
عشر وسبعما(sic) | سنة

Center:

الله
وما النصر الا من عند
لا اله الا الله
محمد رسول الله
ارسله بالهدى

BM (24, 1.74). PLATE XXIX. Courtesy of Mr. N. M. Lowick. The religious invocation on both sides is that of Damascus.

195A. See below, p. 181.

199A. See below, p. 182.

203A. See below, p. 181.

203B. See below, p. 181.

204A. See below, p. 182.

212A. See below, p. 182.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

215A. No mint, undated, *Copper*. Border: circular line in circle of dots on obverse; circular line on reverse.

الملك
الناصر



Wheel with eight spokes, small circle in the center

München (17, 1.043). Courtesy of Dr. Peter Jaeckel.

215B. No mint, undated, *Copper*. Border on both sides: circular line in circle of dots.

Field divided by two rows of large dots into three segments.

السلطان
الملك
(الناصر)



محمد
. . . . . .
ناصر الدنيا
. . . . . .
(و الدين)

Berman (15, 1.27). PLATE XXIX.

216A. DAMASCUS, 72– H., *Copper*. Border on both sides: Circular line in circle of dots; large naskhy characters as on 216.

(السلطان)
الملك النا
صر

ضرب
دمشق سنة
. . . . عشرين

Berlin (20, 3.29). PLATE XXX.

216B. No mint, undated, *Copper*. Same obverse die as 216.

الملك
الناصر

الملك
الناصر

Balog (12, 2.03). Almost square flan.

217A. No mint, undated, *Copper*. Slightly scalloped linear border on both sides.

مولانا
السلطان

الملك
الناصر

Balog (18, 2.51). Note the regal title mawlānā (Cf. 217).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

219A. No mint, undated, *Copper*. Border on both sides: circular line in circle of dots.
No circular legend.

قلاون	(بالهدى)
السلطان الملك ا	لا اله الا الله
لناصر ناصر الدنيا	محمد رسول الله
والدين محمد بن	ارسله

Qalā'ūn faultily written.
Awad (20, 2.00); Paris, Hoard I (18, 2.15). PLATE XXX.

230A. No mint, undated, *Copper*. Border on both sides: circular line.

As 230.



بالهدى
لا اله الا الله
محمد رسول الله
ارسله

Balog (19, 2.92).

233A. ALEPPO, 711 H., *Copper*.

As 233.

As 233, but date:
احد وعشر

Paris (20, 2.25).

233B. TRIPOLI, 7–9 H., *Copper*. Border on both sides: circle of dots.

As 233.

As 233, but mint and date in the marginal legend read by Dr. Peter Jaeckel as:
... ضرب بطرابلس سنة تسع ...

München (20, 2.048). Courtesy of Dr. Peter Jaeckel.

234A. Mint and date missing, *Copper*. Border missing on both sides. Counter-clockwise marginal legend on both sides:

(السلطان الملك الناصر) ناصر الدين ..... ضرب ....

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Center, counter-clockwise waterwheel, on both sides, in which:

محمد



ية
سبما
و

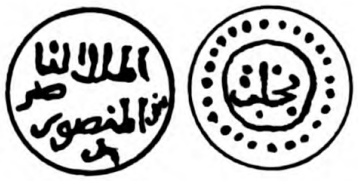
Balog (20, 1.95). PLATE XXX.

236A. ALEPPO, undated, *Copper*.

Border: circular line

Border: circle of dots between two circular lines.
Center: بحلب

الملك الناصر
بن المنصور



Berlin (13, 2.10). PLATE XXX.

241. Reattributed to al-Nāṣir Ḥasan, no. 374A.

244A. TRIPOLI, 71– H., *Copper*. Border on both sides: double circle of small dots. Counter-clockwise marginal legend on both sides:

السلطان الملك الناصر ناصر الدنيا و ضرب بطرابلس .... عشر وسبعماية

Center in circle of small dots:

الدين

Center in circle of small dots: *buqjah* in small square of dots.



Berman (17, 1.75; 19, 1.92). PLATE XXX.

244B. Mint missing (Tripoli?), 7(1)4 H., *Copper*. Border on both sides: double circle of small dots. Counter-clockwise marginal legend on both sides:

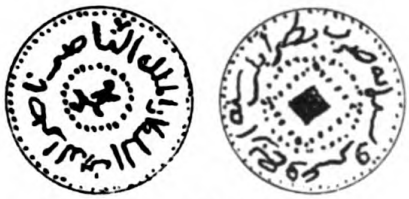
السلطان الملك الناصر ناصر الدنيا والدين ..... اربع .....

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Center, in circle of small dots:

Center: as 244A.

محمد



Berlin (19, 1.64). PLATE XXX.

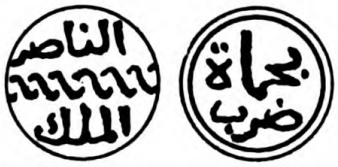
244A and 244B seem to belong to the same period as the issues 242–244.

251A. ḤAMĀH, undated, *Copper*.

Border: thick circular line. Field divided by horizontal flexed cable to left.

Border: double circle.

الناصر
الملك



بجماة
ضرب

Berlin (15, 2.14). PLATE XXX.

263. Attribution of this variety to Tripoli is possible on the basis of a specimen in Paris (19, 2.20), top line of obverse: بطرابلس

265. Reattributed to Tripoli on the basis of information received from Mr. N. M. Lowick that on a better preserved specimen in the BM (not catalogued) the mint is طرابلس.

AL-MANSŪR ṢAYF AL-DĪN ABŪ-BAKR

741–742 H./A.D. 1341

266A. Mint and date missing, *Silver*. Border: circular line on obverse; missing on reverse. No circular legend.

لا اله الا الله
محمد رسول الله (ارسله)
بالهدى و دين
(الحق)

وما توفيق الا
بالله السلطان الملك
المنصور سيف الدنيا و الدين
ابو بكر بن السلطان الملك
الناصر محمد ....
.....

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Berlin (21, 2.43). PLATE XXX. The first silver coin recorded for Abū Bakr. The religious legend at the obverse top occurs most frequently on Damascus coins, but is also seen occasionally on those from the Cairo mint.

268A. ALEPPO, 741 H., *Copper*. Border on both sides: thick circular line, in it, linear hexagram with pellet in each external angle.

Center: ضرب بحلب



Center: احد واربعين سبعماية

Balog (20, 3.20); Berlin (19, 3.30); Berman (14, 2.69; 14, 3.03); Paris, Hoard I (16, 2.60). PLATE XXX.

Note that on this and the following issue the century is also present, as against Abū Bakr's Damascus *fulūs* and al-Nāṣir Muḥammad's equally anonymous Aleppo (238) and Tripoli (240) issues, on which only the digit and the decade are engraved.

268B. ALEPPO, 742 H., *Copper*.

As 268A.

As 268A., but center: اثنين واربعين سبعماية



Berlin (20, 3.39); Paris (17, 2.80). PLATE XXX.

AL-NĀṢIR SHIHĀB AL-DĪN AḤMAD

742–743 H./A.D. 1342

269. Only two specimens of this very rare and pleasing gold coin are recorded in *MSES*. A third coin is reported to be in the collection of a West German diplomat. An excellent photograph of a fourth dinar has been supplied to me by M. Raoul Bajocchi of Cairo (PLATE XXX, 269/1), and now, by courtesy

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of M. Raoul Curiel, I have a cast of a fifth specimen, belonging to M. G. Gautier in Paris (28, 6.36, PLATE XXX, 269/2).

271A. DAMASCUS, 743 H., *Silver*. Border on both sides: circular line in circle of dots. No circular legend.

بالله	ضرب بد(مشق)
وما توفيق الا	السلطان الملك
لا اله الا الله محمد	شهاب الدنيا والدين احمد بن
رسول الله ارسله	الملك الناصر محمد بن
بالهدى ودين الحق	قلاون سنة ثلاث
	واربعين

Berlin (21, 2.95). PLATE XXXI. First recorded dirhem of al-Nāṣir Aḥmad struck at Damascus.

271B. ALEPPO, date missing, *Silver*. Border missing on both sides.

ضرب بحلب	السلطان الملك
لا اله الا الله	الناصر شهاب الد(نيا و)
☙	الدين احمد بن الملك
محمد رسول الله	(الناصر محمد)
(ارسله) بالهدى	

Berman (20, 2.85). PLATE XXXI. First recorded dirhem of al-Nāṣir Aḥmad struck at Aleppo.

AL-ṢĀLIḤ ʿIMĀD AL-DĪN ISMĀʿĪL

743–746 H./A.D. 1342–1345

278A. See below, p. 182.

282A. ḤAMĀH, 745 H., *Silver*.

As 282.

Paris, Hoard III (20, 4.21).

As 282, but date at the last line:

سنة خمس

282B. TRIPOLI, 74– H., *Silver*. Border missing on both sides.

ضرب بطرابلس	السلطان الملك
لا اله الا الله	الصالح عماد الدنيا
محمد رسول الله	والدين اسماعيل
ارسله بالهدى	.... اربعين وسبعماية

Paris, Hoard III (20, 2.85). PLATE XXXI.

282C. See below, p. 183.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

291A. ALEPPO, 743 H., *Copper*. As 291, but marginal legends clockwise.



Balog (19, 2.53).

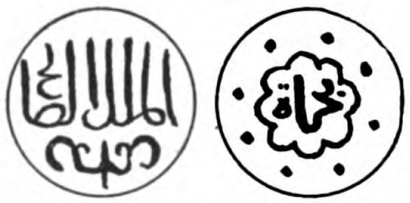
291B. ALEPPO, 743 H., *Copper*. As 291, but marginal legend clockwise on obverse; counter-clockwise on reverse.
Balog (20, 2.88).

296A. ḤAMĀH, undated, *Copper*.

Border missing.

Border: linear circle, in which octolobe. Between the two, eight pellets.
Center:

لح (sic)
الملك لصا



بحماة

Berlin (18, 2.40). PLATE XXXI.

AL-KĀMIL SAYF AL-DĪN SHAʿBĀN I
746–747 H./A.D. 1345–1346

299A. CAIRO, date missing, *Silver*.

Border: circular line.

ضرب بالقاهرة

السلطان الملك ا
الدنيا
لكامل سيف والدين
شعبان
محمد
بن الناصر

Border missing.

الله
الا عند
وما النصر من
لا اله الا الله
محمد رسول الله
.....

Berlin (21, 3.47). PLATE XXXI. First recorded dirhem of al-Kāmil Shaʿbān struck at Cairo.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-MUẒAFFAR SAYF AL-DĪN ḤĀJJI I
747–748 H./A.D. 1346–1347

306A. DAMASCUS, Muḥarram, 748 H., *Gold*. Border on both sides: circular line. No circular legend.

الله	ضرب بدمشق
وما النصر الا من عند	السلطا الملك المظفر
لا اله الا الله محمد	سيف الدنيا والدين حاجى
❧	بن الملك الناصر فى المحرم
رسول الله ارسله بالهدى	❧
ودين الحق ليظهره على	سنة ثمان واربعين
الدين كله	وسبعماية

Leuthold (26, 6.52). PLATE XXXI. Photograph courtesy of M. Raoul Bajocchi, Cairo. First recorded dinar of 748 H. Three of the four dinars of 747 H. recorded in *MSES* also indicate the month.

307A. See below, p. 183.

308. See below, p. 184.

308A. See below, p. 183.

316. The first line of the obverse is emended to لعز on the basis of the Berlin specimen reported by Dr. Peter Jaeckel.

Border: circular line in circle of dots, in which linear hexalobe.	Border: circular line, in which hexalobe. Between the two, counter-clockwise marginal legend.
لعز	سبع واربعين وسبعماية
السلطان	Center: الله
المظفر	لا اله الا
❧	محمد رسول الله

Berlin, PLATE XXXI.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-NĀṢIR NĀṢIR AL-DĪN ḤASAN

IST REIGN: 748–752 H./A.D. 1347–1351

326A. DAMASCUS, date missing, *Silver*. Border on both sides: scalloped rim with pellet in each external angle. No circular legend.

ضرب بدمشق	الناصر
لا اله الا الله	السلطان الملك
☙	ناصر الدنيا والدين ح(سن)
محمد رسول الله	بن الملك (الناصر محمد)
ارسله بالهدى	(بن قلاون)
.....	

Berman (20, 2.50). PLATE XXXI. First Damascus dirhem of al-Nāṣir Ḥasan's first reign. Note the ornament on the reverse, typical for Damascus: ☙

AL-ṢĀLIḤ ṢALĀḤ AL-DĪN ṢĀLIḤ

752–755 H./A.D. 1351–1354

335A. DAMASCUS, date missing, *Silver*. Border missing on both sides. No circular legend.

....	ضرب بدمشق
لا اله الا الله	السلطا الملك
محمد رسول الله	❧
ارسله بالهدى	الصالح صلاح (الدنيا)
....	والدين صالح ...
	....

Awad (15, 2.80). PLATE XXXI.

339. Attributed to Ḥamāh on the basis of a specimen on which the last line of the obverse is preserved.
Berman (17, 1.95). PLATE XXXI. خسين بحماة

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-NĀṢIR NĀṢIR AL-DĪN ḤASAN

2ND REIGN: 755–762 H./A.D. 1354–1361

373. Examination of two additional specimens of this issue (Berman [18, 1.60] PLATE XXXI; [15, 1.30] PLATE XXXI) indicates that the marginal legends read clockwise rather than counterclockwise as recorded in *MSES* on the basis of two very worn specimens.

374A. ḤAMĀH, undated, *Copper*. This issue was listed in *MSES* under al-Nāṣir Muḥammad (no. 241), my reading having been based on my two very poorly preserved coins. Dr. Peter Jaeckel kindly drew my attention to the Berlin specimen on which the obverse marginal legend clearly shows the name of al-Nāṣir Ḥasan.

Border: dotted line. Clockwise marginal legend:
السلطان الملك الناصر حسن

Circle, in which:
بحماة

Border: circular line. Mihrab, rounded arch on two columns, with hanging mosque lamp.



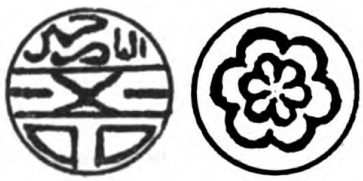
Berlin (17, 2.33); München. PLATE XXXI.

Heraldic: *Fesse with Chalice/Rosette*

374B. No mint, undated, *Copper*. Border on both sides: circular line.

Field divided by two horizontal lines (fesse) into three segments.
In upper segment, probable reading:
(النا)صر حسن
In central segment chalice between two horizontal bars.
In lower segment two quarters of a round disc.

Six-petaled hollow rosette in hexalobe.



Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Berman (18, 1.30). PLATE XXXII.

The attribution to al-Nāṣir Ḥasan is tentative; the coin bears some resemblance to no. 905.

AL-MANṢŪR ṢALĀḤ AL-DĪN MUḤAMMAD
762–764 H./A.D. 1361–1363

385. Mr. N. M. Lowick, in a review of *MSES* (*NC* 1964, p. 364), has drawn attention to the fact that *BMC* 571[w], and a similar unpublished *fals* in the BM, had been overlooked in *MSES*. He also pointed out that the date was 761 H. I have since examined the two coins in the BM. The date is on both similarly defectively written and, I believe, definitely 762 H. (اثنين written: اثاى).

395A. No mint, undated, *Copper*. Border on both sides: circular line.

Clockwise marginal legend: السلطان الملك المنصور
Center, in inner circle: محمد
Eagle walking to left, as on 395, (crescent on pedestal variety) and a large pellet to right of the crescent.

Berman (16, 2.40). PLATE XXXII.

AL-ASHRAF NĀṢIR AL-DĪN SHA'BĀN II
764–778 H./A.D. 1363–1377

Regretably, in all the coin legends in which al-Ashraf Sha'bān's name is followed by that of his father, Ḥasan (حسن) has been written instead of the correct name, Ḥusain (حسين). Therefore, حسن should in every instance be corrected to حسين. Likewise this correction should be made for the coinage of his two sons, al-Manṣūr 'Alā al-Dīn 'Ali and al-Ṣāliḥ Ṣalāḥ al-Dīn Ḥājji II.

432A. ALEPPO, 770 H., *Silver*.

As 432.

As 432, but top: سبعين

Paris, Hoard III (20, 3.62).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

432B. ALEPPO, 773 H., *Silver*.

As 432. As 432, but date:

سبع وسبعين

Paris, Hoard III (16, 2.92).

432C. ALEPPO, date missing, *Silver*. Border missing on both sides.

لااله الا الله	الاشرف ناصر
محمد رسول الله	الدين شعبان
ارسله بالهدى	بن حسين
ودين بحلب	

Paris, Hoard III (17, 1.70). PLATE XXXII.

443A. CAIRO, 771 H., *Copper*. Usual type of the Cairo *fals*, but unpublished year:

As 443.

ضرب بالقاهرة
احد و ٧٠
سنة سبعين
وسبعماية

Berlin (24, 4.25); Balog (25, 4.20). PLATE XXXII.

444A. CAIRO, 774 H., *Copper*.

As 444. As 444, but date:

اربع وسبعين

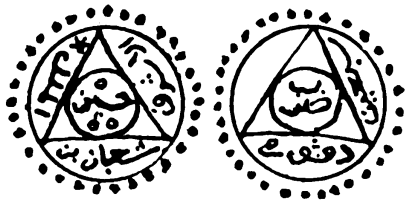
Berlin (24, 3.85); Paris, four specimens.

459A. DAMASCUS, 77– H., *Copper*. Border on both sides: circle of dots. On both sides: triangle, in which central circle.

Segments: Segments:

شعبان بن | الاشرف | الملك* سبعين | .... | سنة دمشق فى

Center: Center:

حسين  ضرب

Berman (17, 2.50). PLATE XXXII.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Heraldic: *Lion passant*

464A. Mint missing, 769 H., *Copper*. Border missing on both sides. Clockwise marginal legend on both sides:

.... سنة تسع وستين وسبعماية السلطان الملك الاشرف شعبان بن حسين بن محمد

On both sides: inner circle, in which lion passant to left.



Berlin (20, 1.77, PLATE XXXII; 19, 2.08); Berman (18, 2.07, PLATE XXXII); Paris (18, 2.52).

AL-MANṢŪR ʿALĀ AL-DĪN ʿALI
778–783 H./A.D. 1377–1381

In all instances the father's name is to be corrected to حسين (See p. 142).

498A. ALEXANDRIA, 779 H., *Copper*. Border on both sides: circular line.

In linear octogon, with floweret in each external angle:

ضرب بالاسكندرية
سنة تسع و
سبعين و
سبعماية

السلطان الملك
المنصور على بن الملك
الاشرف شعبان بن حسين

Balog (24, 4.32).

498B. ALEXANDRIA, 782 H., *Copper*.

As 498A.

As 498A, but date:

سنة ثلاث
وثمانين
وسبعماية

Balog (22, 2.00).

498A, 498B are the first dated Alexandria *fulūs* of al-Manṣūr ʿAli.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

500A. Mint missing, undated, *Copper*.

Border: wavy circle. Linear octogon, floweret in each external angle.

السلطان الملك
على
المنصور بن الاشرف
شعبان بن حسين

....
المنصور
المنصور

Balog (23, 4.40). PLATE XXXII. Note the Sultan's laqab, المنصور, repeated twice on the reverse.

500B. Mint missing, undated, *Copper*.

Border missing. Linear octogon, with floweret in the external angles.

السلطان الملك (المنصور)
على ..... خلد

المنصور

Balog (20, 3.90). PLATE XXXII. Note the Sultan's laqab, المنصور, on the reverse. The reading of the lower obverse is not certain.

500C. ALEXANDRIA (the pure?), undated, *Copper*.

Border (traces): linear dodecalobe in circle of dots. Linear octogon in circle, within a circle of dots. In the external angles, flowerets.

السلطان (الملك)
على
المنصور بن السلطان
شعبان بن حس(ين)

سكندر
طاهرة
يه

Berman (20, 3.80). PLATE XXXII. The reading of the lower half of the reverse is not certain.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-ṢĀLIḤ ṢALĀḤ AL-DĪN ḤĀJJI II

1ST REIGN: 783–784 H./A.D. 1381–1382

515A. ALEPPO, date missing, *Gold*. Scalloped border on both sides.

الله	ضرب بحلب
وما النصر الا من عند	السلطان الملك الصالح
لا اله الا الله محمد	صلاح الدنيا والدين حا
رسول الله ارسله با	بن حسين جى بن الملك الاشرف شعبان
لهدى ودين الحق ليظهره	بن الملك الناصر اعز . . . .
(على) الدين كله	

Paris (26, 8.14). PLATE XXXII. The last word on the obverse, starting with an alif, may be either the beginning of اعزه الله, or اعز الله ملكه.

519, 520. In *MSES*, I summarized Jungfleisch's and my own speculations as to whether these two unusual copper issues of al-Ṣāliḥ Ḥājji were intended to serve as weights or as a special issue of coinage. Dr. Jere L. Bacharach has solved this problem in drawing my attention to a passage in Ibn Taghri Bardi, Ed. Popper, V. p. 351, (21) to p. 352 (9). According to Ibn Taghri Bardi, in 783 H. the amīr Jarkas al-Khalīli struck new *fulūs*, different from the old ones. One was a *fals* weighing one *wuqīyyah* and valued at one-quarter of a dirhem. The other, weighing only one-half wuqīyyah, was valued at one-eighth of a dirhem. Thus a dirhem was worth 48 dirhem-weights of copper. (This meant a return to the exchange rate of before 759 H.). Commercial transactions came to a stand-still, prices rose and commodities became scarce, until Barqūq, atabek at the time, ordered the striking of the objectionable issue stopped and returned to the previous standard.

In consequence, issues 519 and 520, although quite different from the regular copper coinage, must be considered simply as coins, part of an unsuccessful monetary experiment.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-ṢĀLIḤ ḤĀJJI as AL-MANṢŪR ṢALĀḤ AL-DĪN ḤĀJJI

2ND REIGN: 791–792 H./A.D. 1389–1390

530A. TRIPOLI, date missing, *Silver*. Border missing on both sides. As 530, but at the top:

. . . .
السلطان الملك
المنصور ناصر الدنيا
والدين حاجى بن الملك
(الاشرف شعبان)

ضرب بطر(ابلس)

Paris, Hoard III (20, 3.47).

Heraldic: *Fesse*

533A. DAMASCUS, 792 H., *Copper*. Border on both sides: circular line.

Field divided by two horizontal lines (fesse):

المنصور
السلطان الملك
حاجى بن شعبان

Linear hexagram, a small pellet in each small triangle.

Segments:

(sic) وسبعا | وتسعين | اثنين | . . . | . . .



Center:
ضرب
بدمشق

Berlin (18, 2.69). PLATE XXXIII.

BURJI MAMLŪKS

In the list of Burji Mamlūks on p. 247, the name of al-Mu'ayyad Abū al-Fatḥ Aḥmad has been erroneously written as Al-Mu'ayyad Shihāb al-Dīn Aḥmad.

AL-ẒĀHIR SAYF AL-DĪN BARQŪQ

1ST REIGN: 784–791 H./A.D. 1382–1389

539B. ALEXANDRIA, 787 H., *Gold*. Border on both sides: double circular line.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

As 540, but date:

سنة
سبح

الله
وما النصر الا من عند
لا اله الا الله محمد
رسول الله ارسله بالهدى
ودين الحق ليظهره على
الدين كله

Banque de France, Paris (26, 11.2). Courtesy of Mr. Raoul Curiel.

Heraldic: *Fesse*

560A. DAMASCUS, $78\frac{6}{7}$ H., *Copper*. Border on both sides: circular line.

Field divided by two Horizontal lines (fesse):

Linear hexagram, pellet in each external angle, and in each small triangle.

Center:

برقوق
(الملك) الظاهر
(ضرب) دمشق



سنة
ف
ست(....)

Berman (17, 1.85). PLATE XXXIII.

562A. No mint, undated, *Copper*.

Border missing.
Obverse of 562.

Border: circular line.
Counter-clockwise marginal legend:
السلطان الملك (الظاهر ابو) سعيد

السلطان
الملك الظاهر
ابوسعيد سيف
الدنيا والدين



In circle:
برقوق

Berman (15, 2.25). PLATE XXXIII.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-ẒĀHIR SAYF AL-DĪN BARQŪQ

2ND REIGN: 792–801 H./A.D. 1390–1399

571A. ALEXANDRIA, 794 H., *Gold*.

Border missing.

اربع
ضرب سكندرية سنة
الثلثا الملك الظاهر
سيف الدنيا والدين ابوسعيد
برقوق خلد الله ملكه
وتسعين وسبعماية

Border: double circular line.

الله
وما النصر الا من عند
لا اله الا الله محمد
رسول الله ارسله بالهدى
ودين الحق

Berlin (26, 14.43). PLATE XXXIII. First recorded Alexandria dinar of the second reign.

577A. Mint missing, 793 H., *Silver*. No circular legend. Scalloped border on reverse.

....
السلطان الملك
الظاهر سيف الدنيا والدين
ابو سعيد برقوق
....

ثلث وتسعين
لا اله الا الله
ص
محمد رسول الله

Paris, Hoard III (20, 3.61). PLATE XXXIII.

Heraldic: *Fleur-de-lis*

592A. ALEPPO (?), 792 H., *Copper*. Border missing on both sides. Clockwise marginal legend on both sides:

.... سنة اثنين تسعين ....

السلطان الملك الظاهر ابو سعيد

Circle, in which: برقوق



Circle, in which: fleur-de-lis.

Balog (19, 2.20). Same style and arrangement as 593, therefore probably Aleppo.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Heraldic: *Fesse*

595A. ALEPPO, 79– H., *Copper*.
Border missing. Circular line.
Field divided on both sides by two horizontal lines (fesse):

السلطان
الملك الظاهر
ابو سعيد





. . . . تسعين
ضرب بحلب
وسبعماية

Balog (18, 2.17).

Heraldic: *Large Chalice*

595B. ALEPPO, undated, *Copper*.

بحلب
برقو(ق)
(ضر)ب
(ال)ظاهر



Large chalice of angular shape between two ornamental leaves.

Berman (17, 2.10). PLATE XXXIII.

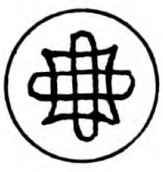
602. The date is 798 H.

Heraldic: *Fesse*

605A. TRIPOLI, date missing, *Copper*. Border on both sides, circular line.
Field divided by two horizontal lines (fesse): Simple arabesque knot.

ضرب بطرابلس
الملك الظاهر
. . . . .





Balog (16, 1.39). The arabesque knot on the reverse is similar to that on Aynāl's *fals* (no. 773) but without the pellets.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

612A. TRIPOLI, date missing, *Copper*. Border missing on both sides.
Counter-clockwise circular legend:
ضرب بطرابلس
Center:
Lion passant to right, tail swept up and forward.
Two standing cranes facing each other, necks intertwined so that each bird's head is turned back. The wings are beating.
BM (15, 2.75). PLATE XXXIII. Although the coin is undated and unidentified, it is tentatively attributed to either Barqūq or Faraj on the basis of the style of the writing as well as that of the lion.

The two finely executed birds, unmistakably cranes, have not hitherto been recorded on Mamlūk coinage. G. C. Miles has identified a somewhat similar figure of a crane in a group which he has attributed to the Seljūks of Syria about three centuries earlier ("Islamic Coins" in *Antioch-on-the-Orontes* IV, part I, p. 119, nos. 155.6.15–25). I am indebted to N. M. Lowick for casts of this coin.

AL-NĀṢIR NĀṢIR AL-DĪN ABŪ AL-SĀʿĀDĀT FARAJ

IST REIGN: 801–808 H./A.D. 1399–1405

640. A specimen in the Berman collection (18, 3.80) has the complete date at the reverse top: اربع وثمانمائة

Heraldic: *Fesse/Fleur-de-lis*

654A. ALEPPO, undated, *Copper*. Border on both sides: rigid cable to left between two circles.
Field divided by two horizontal lines (fesse):

ضرب
الملك الناصر
بحلب



Fleur-de-lis.

Berlin (20, 2.15; 20, 2.92); BM (20, 2.10), courtesy of Mr. N. M. Lowick. PLATE XXXIII.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Heraldic: *Lion in fesse*

656A. ḤAMĀH, undated, *Copper*.

As 656.

As 656, but mint:



بحماة

Balog (24, 3.14).

AL-MANṢŪR ʿIZZ AL-DĪN ʿABD AL-ʿĀZĪZ
808–809 H./A.D. 1405–1406

670A. ḤAMĀH, 809 H., *Silver*.

Border: circular line.

بحماة
السلطان الملك المنصور
عبد العزيز بن السلطان الملك
الناصر عام تسع ....
....

Border missing.

(لا اله الا الله)
محمد رسول الله
ارسله بالهدى
ودين الحق

Berlin (19, 3.45). PLATE XXXIII.

AL-MUẒAFFAR SHIHĀB AL-DĪN ABŪ AL-SAʿĀDĀT AḤMAD
824 H./A.D. 1421

698. *Silver*. Awad (15.5, 2.30).

698A. Mint missing, 824 H., *Silver*. Scalloped border on both sides.

....
لا اله الا الله
محمد رسول الله
ضرب

ابو السعا(دات)
السلطان الملك المظفر
اربع عشر (sic) وثمانماية

Paris. PLATE XXXIII.

AL-ẒĀHIR ABŪ AL-FATḤ SAYF AL-DĪN ṬAṬAR
824 H./A.D. 1421

700. Mint missing, (824 H.), *Silver*. Second recorded specimen. A more detailed description of this issue is now possible.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Border missing.
No horizontal dividing lines.

ططر
الملك الظاهر
ابو الفتح

Traces of border: two festooned, scalloped intersecting ribbons, consisting of a line of dots between two parallel lines.

لا اله الا الله
محمد رسول الله
(اربع) عشرين

Awad (15, 2.20).

700A. Mint and date missing, but 824 H., *Silver*. Border on both sides: two festooned, scalloped, intersecting ribbons of one line of dots between two parallel lines.

ابو الفتح ططر
السلطان الملك
الظاهر عز نصره

.....
لا اله الا الله
محمد رسول الله
ضرب ا (؟)

Awad (22, 2.30). PLATE XXXIII.

AL-ṢĀLIḤ NĀṢIR AL-DĪN MUḤAMMAD
824–825 H./A.D. 1421–1422

702A. Mint and date missing, *Silver*. Intersected scalloped border of a dotted line between two simple lines.

محمد
الملك الصالح
ناصر الدنيا
و الدين

لا اله الا الله
محمد رسول الله
ارسله بالهدى
.....

Awad (15.5, 2.30).

702B. No mint, undated, *Silver*.

Circular line in circle of dots.

محمد بن ططر
السلطان الملك
الصالح

Intersected scalloped border of a dotted line between two simple lines.

لا اله الا الله
محمد رسول

Bacharach, *ANSMN* 14, no. 6 (15, 2.30).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-ASHRAF ABŪ AL-NAṢR SAYF AL-DĪN BARSBĀY
825–841 H./A.D. 1422–1438

Half-dirhem

713A. Mint and date missing, *Silver*.

Small central lozenge with wavy sides, angles connected with the scalloped border.

Incuse of the obverse.

Segments, clockwise:

U.L.	L.L.	L.R.	U.R.
		ى	الاشرف ابو
...	...	سبا	الملك النصر
		بر	



In the central lozenge:

نصف

The arrangement is similar to 686 (al-Mu'ayyad Shaykh) and to 738–740 (al-Ẓāhir Jaqmaq).

Berman (15, 1.35). PLATE XXXIV.

715A. DAMASCUS, undated, *Silver*. Border on both sides: circular line.

Clockwise marginal legend:

(السلطان الملك الاشرف) برسبا خلد الله

In inner circle:

نصف

وربع

بدمشق

لا اله الا الله

محمد رسول الله

ضرب

Awad (16, 2.25). PLATE XXXIV.

719A. ALEPPO, undated, *Silver*. Border on both sides: circular line.

Clockwise marginal legend:

السلطان الملك الاشرف ابو النصر

Field divided by three rigid horizontal cables to left:

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In inner circle:

ی
سبا
بر



بحلب
لا اله الا الله
محمد رسول الله
ضرب

Awad (16, 2.20).

719B. ALEPPO, undated, *Silver*. Border on both sides: circular line.

Clockwise marginal legend: السلطان الملك الاشرف ابو النصر

No cables. Ornament between the 2nd and 3rd lines.

In inner circle:

ی
سبا
بر

بحلب
لا اله الا الله
محمد رسول الله
ضرب

Bacharach *ANSMN* 14, no. 7 (17, 1.85; 16, 2.23; 15, 2.27).

719C. Mint missing, undated, *Silver*. Border on both sides: circular line.

Clockwise marginal legend: ی السلطان ✕ الملك ابو النصر ✕ برسبا

Field divided by a horizontal rigid cable to left.

In inner circle: الاشرف



لا اله الا الله
محمد رسول الله
ضرب

Awad (17, 2.20). PLATE XXXIV. Bacharach, *ANSMN* 14, no. 8 (17, 2.21).

I am afraid I misled Dr. Bacharach on the attribution of this dirhem, published by him in *ANSMN* 14. I had thought that the marginal legend, which was difficult to decipher, ended with يوسف بن, *Yusūf ben* (*al-Ashraf* in the inner circle). Dr. Awad's specimen now clearly shows that the coin was issued by Barsbāy himself and not by his son. I regret having misinformed Dr. Bacharach.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

727. L. 1003, recorded in *MSES* as no. 726 (838 H.) is actually dated 839 H.

729A. Mint and date missing, *Silver*. Border on both sides: intersected scalloped ribbon of a dotted line between two parallel lines.

Field divided by two horizontal rows of pellets.

ى
برسبا
. . . . . .
السلطان الملك
. . . . . .
الاشرف

. . . . .
لا اله الا الله
محمد رسول الله
الله

Awad (15, 2.20). PLATE XXXIV.

Heraldic: *Lion passant*

731A. DAMASCUS, 826 H., *Copper*.

السلطان
بـ
سباى
ضرب
دمشق
٨٢٦

Lion passant to left, long tail curved up and forward.

Balog (15, 2.53). Date written with numerals.

AL-ʿAZĪZ JAMĀL AL-DĪN ABŪ AL-MAḤĀSĪN YŪSUF

13 Dhū al-Hijja 841—19 Rabiaʿ I. 842 H./A.D. 1438

Correct al-ʿAzīz Yūsuf's dates in *MSES* as above.

732. CAIRO, 842 H., *Gold*. There are two varieties of this rather rare gold coin. The text of the legends is the same on the newly discovered specimens as on those already published in *MSES*, except that now we have the date, 842 H. The difference lies in the disposition of some of the words. Rigid cables to left on all coins.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Var. a.

بالقاهرة
السلطان الملك العزيز ا — As 732.
سن ى
بو المحا يوسف بن برسبا
سنة ثنين اربعين و ثمانماية

Note: Yūsuf is placed under the سن of Abū al-Maḥāsin: سن ابو المحا يوسف in the third line.

Paris (16, 3.40) PLATE XXXIV; Leuthold (16, 3.36); Awad (16, 3.50).

Var. b.

As 732a, except the third line: — As 732.

يوسف ى
ابو المحاسن بن برسبا

Note: Yūsuf is placed above the سن of Abū al-Maḥāsin: يوسف ابو المحاسن

Awad (15, 3.50). PLATE XXXIV, obv.

732A. CAIRO, 842 H., *Gold*. Border of dots and small diamonds alternating.

Field divided by three horizontal cables to left. — As 732.

بالقاهرة
السلطان الملك العزيز
سف ى سنة
يو بن برسبا اثنين
و اربعين ثمانماية

Awad (15, 3.46). PLATE XXXIV, obv. No mention of Abū al-Maḥāsin, ابو المحاسن, and the date starts at the end of the third line.

733A. No mint, undated, *Copper*. Border on both sides: circular line.

Counter-clockwise marginal legend: — Large inner circle, from which triangles point outward, like the rays of a sun.

السلطان الملك العزيز ابو المحاسن جمال الدين يوسف

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Large six-petaled rosette in circular line.



Center:

لا اله الا الله
محمد
رسول الله

Berman (22, 3.56). PLATE XXXIV. The obverse marginal legend is partially reconstructed.

AL-ẒĀHIR ABŪ SA'ĪD JAQMAQ
842–857 H./A.D. 1438–1453

737A. DAMASCUS, date missing, *Gold*. The field, on both sides, divided by three horizontal cables to left.

ضرب بدمشق
السلطان الملك الظاهر
ابو سعيد جقمق عز نصره

As 734 to 736.

Awad (15, 3.40; 15, 3.40; 15, 3.40); Leuthold (16, 3.36). This is Jaqmaq's first recorded Damascus issue, with بدمشق at the top of the obverse.

737B. ALEPPO, date missing, *Gold*. This issue, represented in Lavoix by three coins, has nevertheless escaped my attention in *MSES*. Border on both sides: linear circle. Field divided by three horizontal cables to left, on both sides.

(ضرب)
السلطان الملك الظاهر
ابو سعيد جقمق عز (نصره)
بحلب

ارسله
لا اله الا الله
محمد رسول الله
بالهدى

L. 1006 (15, 3.42); L. 1007 (15, 3.41); L. 1008 (15, 3.41).

744A. Mint and date missing (DAMASCUS), *Silver*.

As 741–744, but above جقمق, three pellets.

As 741–744.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

746. The obverse marginal legend ends جقمق.

746A. ALEPPO, undated, *Silver*.

As 746. Scalloped border.

.....
لا اله الا الله
محمد رسول الله
بحلب

Matsson, *Numismatiska Meddelanden*, 1965, pp. 26–28 (15.5, 1.86). PLATE XXXIV.

754. On the basis of a better preserved specimen in the Berman collection, the description of the obverse is corrected to read:
Border: circular line.
Field divided by one horizontal line:

جقمق
سعيد



Note the absence of *Abū* in *Abū-Sa'īd*: ابو سعيد.
Berman (16, 2.15).

Heraldic: *Fesse*

754A. DAMASCUS, undated, *Copper*.

In the field: linear triangle with slightly concave sides. In the center, small circle, with arabesque knot.

Border missing. Field divided by two horizontal lines (fesse):

Segments:

L	R	T
سعيد	ابو	الملك



ضرب
جقمق
دمشق

Berlin (16, 1.45). PLATE XXXIV.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

754B. Mint and date missing, *Copper*.

Field divided by three rigid horizontal cables to left.

السلطان الملك الظاهر
ابو سعيد جقمق عز نصره
... اربعين



Field divided by two rigid horizontal cables to left.



ارسله
لا اله الا الله
محمد رسول الله

Milan National Museum (Castello Sforzesco), Leuthold, "Monete cufiche," p. 61. Similar to the gold coins, nos. 734 to 737.

Heraldic: *Fleur-de-lis*

754C. DAMASCUS, 844 H., *Copper*. Border on both sides: circular line.

No circular legend.

ن
السلطا
الملك الظاهر
جقمق

Clockwise marginal legend:
ضرب بدمشق سنة اربع واربعين وثمانماية
Inner circle, in which fleur-de-lis, similar to that on 654. The marginal legend has been partially reconstructed.



Paris; Berman (15, 1.16). PLATE XXXIV.

Heraldic: *Fesse*

754D. ALEPPO, date missing, *Copper*. Border missing on both sides.

(ا)لملك الظا(هر)
ابو سعيد جقمق
. . . . . .

. . . . .
ب
ضر بحلب
. . . . .

Berman (15, 1.65). PLATE XXXV.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

754E. No mint, undated, *Copper*. Border on both sides: thick circular line.

الملك ا (لظاهر)





جقمق

Berman (15, 1.70). PLATE XXXV. It is possible that there was a marginal legend outside the thick circular line.

AL-ASHRAF ABŪ AL-NAṢR AYNĀL
857–865 H./A.D. 1453–1461

758. *Gold*. Berman (16, 3.40), the fourth line of the reverse reads: ارسله بالهدى.

759A. CAIRO, 857 H., *Gold*. Border on both sides: dotted line.

Field divided by three rigid horizontal cables to left.

بالقاهرة
الملك الاشرف
ابو النصر اينال عزنصره
. . . . .

Field divided by two horizontal double lines of dots.

٨٥٧ الله ٨٥٨
: : : : : : : : : :
لا اله الا الله
: : : : : : : : : :
محمد رسول الله

Awad (15.5, 3.45). PLATE XXXV.

759B. Mint missing, 857 H., *Gold*. Border of alternating dots and small diamonds.

Field divided by two rigid cables to left.

السلطان الملك
ابو النصر اينال
عام ٨٥٧

Field divided by two rigid cables to left.

ارسله ٥
لا اله الا الله
محمد رسول الله

Awad (15, 3.50). PLATE XXXV.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

760. *Gold.* Balog (15, 3.36), a specimen with بالقاهرة at the top of the obverse, identifying the mint as Cairo.

761. *Gold.* Awad (15, 3.50), a specimen with Aināl written اينا ل.

762A. CAIRO, date missing, *Gold.*

As 762, but last line written: عز نصره بالقاهرة	As 762.

Awad (15, 3.50). Note that *MSES* 762, Balog (16, 3.40), belongs here.

765A. CAIRO, undated, *Silver.*

As 766.	As 763–765a.

Mule of a Damascus obverse with a Cairo reverse. Neither side carries a date, but as the Cairo reverse was used only between 861 and 864 H., it seems reasonable to attribute the coin to the same period.

ANS (16, 1.52); Berman (13, 0.70). PLATE XXXV; Awad.

768A. DAMASCUS, no date, *Silver.*

As 766–768.	As 766–768, but in the central cartouche arabesque knot instead of the date: بد مشق

Berman (15, 1.43). PLATE XXXV.

771A. ALEPPO, undated, *Silver.*

As 771, but circle within linear octolobe, in it: اينال	As 771, but بحلب at the last line, and no date.

In L. 1056, L. 1057 and L. 1058, I wrongly corrected Lavoix's reading of the mint, بحلب, for a non-existent date.

771B. ALEPPO, undated, *Silver.*

As 771. Simple circle.	As 771, but no date and بحلب at the top of the reverse.

L. 1059 omitted from *MSES* by error; ANS, the two coins listed under *MSES* 771, belong here.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AL-MU'AYYAD ABŪ AL-FATḤ AḤMAD
865 H./A.D. 1461

782A. DAMASCUS, undated, *Silver*.

Circle of big dots.

° °
احمد



Border missing.

Diamond-shaped medallion with a convexity on each side; within:

مشق
بد

around which only a lām remains of رسول in the profession of faith formula.

Berman (12, 0.70). PLATE XXXV. The reverse medallion, first introduced on the silver of Aynāl, provides the basis for the attribution to al-Mu'ayyad Abū al-Fatḥ Aḥmad. Al-Muẓaffar Shihāb al-Dīn Aḥmad who reigned in 824 H., immediately after al-Mu'ayyad Abū al-Naṣr Shaykh, retained the characteristic ornamentation and epigraphical style of his predecessor on the silver coinage.

AL-ẒĀHIR ABŪ-SA'ĪD KHUSHQADAM
865–872 H./A.D. 1461–1467

786A. CAIRO, 867 H., *Gold*.

As 786.

As 786, but date at the last line:

٨٦٧

Awad (15, 3.50).

797A. DAMASCUS, 87– H., *Copper*. Border on both sides: circular line.

الملك الظاهر
لـ خوشقدم

Khushqadam upside down.

Clockwise marginal legend:
ضرب بدمشق ..... سبعين (وثمانماية)

Center: Five petaled hollow rosette in a round disc.



Paris (20, 2.35).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

798A. No mint, undated, *Copper*. On both sides, the same counter-clockwise marginal legend between two circular lines:

السلطان الملك الظاهر ابو سعيد

Center:

م
خشقد



السلطان الملك الظاهر ابو سعيد

Center:

م
خشقد

Balog (18, 1.74). Mule of 798 obverse.

Heraldic: *Chalice*

800A. Mint and date missing, *Copper*. Border on both sides: circular line?

Counter-clockwise marginal legend:

السلطان الملك الظاهر ابو سعيد

Marginal legend or ornamented margin missing. Inner circle, in which a chalice.

Inner circle, in which:

خشقد
م



Berman (18, 1.93). PLATE XXXV. The first occurrence of a chalice as Khushqadam's blazon.

AL-ẒĀHIR SAYF AL-DĪN BILBĀY
872 H./A.D. 1467

800B. Mint and date missing, *Gold*. Border missing on both sides; field divided by three rigid horizontal cables to left, on both sides.

.....
(الس)لطان الملك الظاهر
ابو سعيد بلباى عز نصره
.....

ارسله
لا اله الا الله
محمد رسول الله
.....

Awad (16, 3.45). PLATE XXXV.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

This gold coin is the first authentic issue of Bilbāy. Şerafettin Erel, *Nādir Birkaç Sikke*, Part 2 (1967), attributed a dirhem (no. 17) to Bilbāy. However, from his illustration of the specimen, the *laqab* is clearly al-Ashraf and not al-Ẓāhir in the obverse marginal legend, and in the center of the obverse the name is clearly Qā'itbāy. I have such a silver coin in my collection and although they are rather negligently engraved, there seems to be no doubt about the reading.

AL-ASHRAF ABŪ AL-NAṢR QĀ'ITBĀY
873–901 H./A.D. 1468–1496

808. *Paris*. A yellow bronze die (27 × 28, height 9) from which the obverse of *MSES* 808 was struck. The mint, Cairo, and date, 881 H., are preserved on the die.

بالقاهرة
السلطان الملك الاشرف
ابو النصر قايتباى عز نصرة
سنة ٨٨١

No pegs or peg-holes; no border; inscription retrograde.

812A. CAIRO, date missing, *Gold*. Border on both sides: circle of dots; field, on both sides, divided by horizontal lines of tiny arches, concave side up, crowned by flowerets.

بالقاهرة ...	قايتباى
لا اله الا الله	السلطا الملك الاشرف
محمد رسول الله	ابو النصر ...
(ضرب)	....

Veli-el-Din Sameh coll., Ronco, Switzerland (17, 3.00). PLATE XXXV.

815. *Gold*. Samir Shamma coll. (15, 3.30), a specimen with the last line of the reverse: بحلب, identifying the mint as Aleppo.

816A. CAIRO, 879 H., *Silver*.

As 817.

As 817, but the date at the last line is: عام ٨٧٩

Berman (17, 1.50). PLATE XXXV.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

826A. ALEPPO, undated, *Silver*.

Border missing. Clockwise marginal legend:

السلطان الملك الاشرف ابو النصر

In circle, within linear octolobe:

ى
قايتبا

Circular line. Clockwise marginal legend:

لا اله الا الله محمد رسول الله

In inner circle:

نصف
بحلب

Bacharach, *ANSMN* 14, no. 9 (16, 1.45).

The obverse marginal legend has been read by Dr. Bacharach, who also pointed out that the reverse legend is in *naskhi*.

827. In *MSES*, the counter-clockwise marginal legend:

السلطان الملك الاشرف ....

has been omitted by oversight.

Half-dirhem

827A. ALEPPO, undated, *Silver*.

As 827.



Profession of faith formula in Aleppo cufic. In center, lenticular medallion with lateral flowerets, in which:

بحلب

Balog (17, 1.36).

835A. CAIRO, date missing, *Copper*. Border missing on both sides; clockwise marginal legend on both sides:

السلطان الملك الاشرف ابو النصر ..... ضرب .....

Center, in circle:

قايتبا



Center (no circle):



هرة
بالقا

Balog (22, 2.14).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

841A. ALEPPO, undated, *Copper*. Border on both sides missing; the same clockwise marginal legend on both sides:

السلطان الملك الاشرف ابو النصر

In circle: قايتبا ى

In circle: بحلب



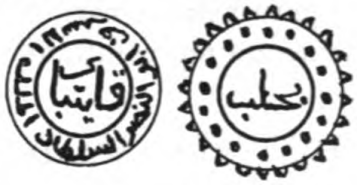
Balog (20, 4.20).

841B. ALEPPO, undated, *Copper*.

As 841A.

Circle of large dots between two circular lines. The external circle is crowned by small triangles. No circular legend.
Center:

بحلب



Balog (20, 4.35).

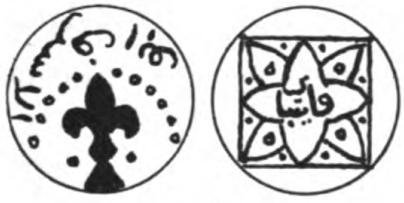
Heraldic: *Fleur-de-lis*

845A. No mint, undated, *Copper*. Border missing on both sides.

Clockwise marginal legend, partially reconstructed:
السلطان الملك الاشرف ابو النصر
Circle of dots, in which a fleur-de-lis, placed on a triangular base.

Linear square, in which a fully opened, stylised flower with four central petals and four petals in the corners of the square.
Center:

قايتبا ى



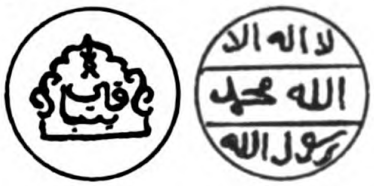
Berlin (22, 7.08). PLATE XXXVI; (24, 6.95). PLATE XXXVI.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Heraldic: *Fesse*

845B. No mint, undated, *Copper*. Border on both sides: circular line.

Ornamented *miḥrāb*, with small mosque-lamp hanging from the tip of the arch. Center: قايتبا ى



Field divided by two horizontal lines (fesse):

لا اله الا
الله محمد
رسول الله

Awad. Cf. the *miḥrāb* on the *fals* of Qanṣūh al-Ghūri (no. 901). The *miḥrāb* on al-Nāsir Hasan's *fals* no. 374A (formerly no. 241) depicts a red stone prayer-niche naturalistically; 854B and 901 are stylized ornamental representations.

AL-NĀṢIR ABŪ AL-SĀʿĀDĀT MUḤAMMAD

901–904 H./A.D. 1496–1498

846A. Mint and date missing, *Gold*. On both sides, finely scalloped linear border; field on both sides divided by three horizontal cables to right.

....	بالهدى
السلطان الملك الناصر	لا اله الا الله
ابو السعادا محمد	محمد رسول الله
....	ارسله

Berlin (16, 3.31). This coin differs from *MSES* 846, as all its cables point to right, and the first and last lines of the reverse are $\frac{\text{بالهدى}}{\text{ارسله}}$, instead of the mint and date. Both mint and date may have been at the first line of the obverse of the present specimen, or at the first and last line.

848. The end of the 4th line, رحمت‌الله, should be corrected to رحمه الله.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

849A. DAMASCUS, date missing, *Silver*. Border on both sides: scalloped circular line.

Counter clockwise marginal legend:

دات ❤ ى
السلطان الملك الناصر ابو السعا بن قايتبا

Linear hexalobe, in which:

محمد

No circular legend.

Field divided by three horizontal cables to left:

بدمشق
لا اله الا الله
محمد رسول الله
. . . .

Berman (12, 1.35) PLATE XXXVI; (13, 1.35) PLATE XXXVI; Horovitz (14.5, 1.37).

855A. No mint, undated, *Copper*.

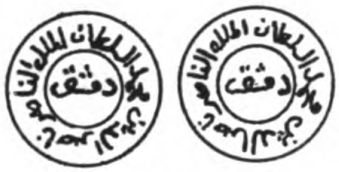
As 855, but 11 pellets. As 855.

Balog (25, 6.41).

858A. DAMASCUS, undated, *Copper*. Border missing on both sides. Mule of an obverse die. On both sides, the same counter-clockwise marginal legend:

السلطان الملك الناصر ناصر الدين محمد

On both sides: circle in which: دمشق
د



Berman (16, 1.09). PLATE XXXVI.

861. Berman (16, 2.50). PLATE XXXVI, a specimen with obverse: Field divided by a horizontal line of small circles.

الملك الناصر
oooooooooo
ب مشق
ضر بد

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The reverse is as 861. In *MSES* I expressed doubts about the attribution to al-Nāṣir Muḥammad b. Qā'itbāy. On stylistic grounds I am now inclined to place it at a much earlier date during the Baḥri rule. With the *laqab* al-Nāṣir, the choice would be, going backward in time, al-Nāṣir Ḥasan, al-Nāṣir Aḥmad, or al-Nāṣir Muḥammad. For stylistic reasons again, I would choose, once more tentatively, al-Nāṣir Muḥammad. Surely, there is a certain similarity between the reverse of the present coins and that of *MSES* 257.

AL-ASHRAF ABŪ AL-NAṢR QĀNṢŪH AL-GHŪRI
906–922 H./A.D. 1501–1516

892A. No mint, undated, *Silver*. Border missing on both sides; clockwise marginal legend on both sides:

لا اله الا الله محمد رسول الله السلطان الملك الاشرف

In linear octolobe, on both sides:

ى ق ه
الغو نصو
ر

Berman (15, 1.35). PLATE XXXVI.

QĀNṢŪH AL-GHŪRI (?)

Heraldic: *Fesse/Large chalice*

902A. No mint, undated, *Copper*. Border missing on both sides. Field divided by two horizontal lines (fesse): الا(شرف) / الملك / ٠٠٠٠٠

Large, rather flat bodied chalice on a triangular stem.



Berman (15, 2.60). PLATE XXXVI. This is a Burji *fals*. The *laqab*, الاشرف, is consistent with al-Ashraf Qānsūh al-Ghūri and

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

so is the chalice, which, although in a different shape and with a heraldic inscription, appears on al-Ghūri's *fals* no. 902 in *MSES*.

UNCERTAIN ATTRIBUTIONS

905B. ḤAMĀH, undated, *Copper*.

Border: circular line.

(النا)صر (؟)
(!)الملك

Border missing.
Field divided by a shallow cable to right, between two horizontal lines.

بحماة
ضرب

Berlin, PLATE XXXVI.

905C. TRIPOLI, undated, *Copper*.

Border missing.
Field divided by two horizontal rigid cables to left.

.....
السلطان الملك
بطرابلس

Border: circular line, in which linear octogram. In the center, six-petaled rosette, with an inner annulet.

Berlin (2 specimens); Berman (22, 3.56) PLATE XXXVI; (20, 3.60) PLATE XXXVI. The sultan's name is illegible; the coin may be either Baḥri or Burji.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

THREE HOARDS OF MAMLŪK COINS

PAUL BALOG

Raoul Curiel, Curator of Oriental Coins in the Cabinet des Médailles of the Bibliothèque Nationale, Paris, has kindly allowed me to publish a summary catalogue of three important Mamlūk hoards in the National Collection. Specimens listed under *Additions* are described in the preceding article.

1. ARMANT HOARD OF 92 COPPER COINS

Nothing is known about the acquisition of this hoard, except that the coins are said to have been found in or near Armant in Upper Egypt. All the *fulūs* have a pleasing black patina which is similar to that of the several hundred Baḥri Mamlūk coins of the 1959 hoard which I acquired and incorporated in *MSES*.

The earliest *fals* of the present hoard is a coin of Qalā'ūn, but the bulk is made up of different issues of al-Nāṣir Muḥammad (67 specimens); there are also 6 of Abū-Bakr and, to indicate the approximative time of the burial of the hoard, twelve of al-Ṣāliḥ Ismā'īl. The period over which these coins were issued stretches from ca. 680 H. to 745 H., (A.D. 1280–1345).

Ruler	*No. MSES*	*No. Additions*	*Number of specimens*
Qalā'ūn		140A (Cairo)	1
Al-Nāṣir Muḥammad	219		2
		219A	2
	220		10
	222		2
	225		1
	230		2
	231		8

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Ruler	*No. MSES*	*No. Additions*	*Number of specimens*
	232		3
	242		1
	242 or 243		2
	247		1
	248		2
	250		2
	245 or 250		28
	uncertain issues		2
Abū-Bakr	267		1
	268		4
		268A	1
Al-Ṣāliḥ Ismāʿīl	285		6
	291		2
	293		6
Anonymous, but al-Nāṣir Muḥammad's period	—	—	3
Uncertain Baḥri	—	—	1
		Total	93

2. Hoard of Early Mamlūk and Ilkhānid Silver Coins

There is no record of the provenance of this hoard or of the circumstances of acquisition. Although the period of circulation stretches over a rather long time, there is little doubt that the coins constitute a real hoard, all the sultans involved being of the early Baḥri period. The earliest rulers represented are Aybak and Quṭuz (1 and 3 specimens, respectively). The Mamlūk series ends with three specimens of al-Nāṣir Muḥammad. One of these is an Armenian tram overstruck by al-Nāṣir Muḥammad, either during his invasions of Cilician Armenia between 714 and 723 H./A.D. 1314–1323, or, during subsequent years from the Armenian tribute to Egypt.

The hoard consists of a total of 355 Mamlūk silver pieces, 154 dirhems and 201 half-dirhems. Beside the Mamlūk issues, there is one dirhem of the Ayyūbid al-Nāṣir Ṣalāḥ al-Dīn b. al-ʿAzīz Muḥammad,

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

ruler of Aleppo, and, 647–648 H., also lord of Damascus. The coin is of the Damascus type (square in circle), from the last two years of the ruler. A half-dirhem belongs to al-ʿAzīz Muḥammad, al-Nāṣir Ṣālaḥ al-Dīn's father.

The latest issues in the hoard are Ilkhānid silver issues: five dirhems of Abū-Saʿid (716–736 H.), a half-dirhem of Sāti Beg Khātūn (739–740 H.), and four dirhems of her husband, Sulaimān (740–744 H.).

Ruler	*No. MSES*	*No. Additions*	*Number of specimens*	
			half dirhem	*dirhem*
Aybak	13		1	
Quṭuz	24 or 25			2
	24		1	
Baybars I	42		1	
	43		2	
	44		2	6
	48			2
	50		5	2
	51			1
	52			1
	53			1
	54.a			6
	55		9	
	66.a			3
	70		2	
	72–74			1
	77.a			2
	82			1
	85			3
	86			1
	78–91			11
	92			1
	93		29	
	uncertain		7	10

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Ruler	*No. MSES*	*No. Additions*	*Number of specimens*	
			half dirhem	*dirhem*
Baraka Qān	107			1
	107.a			2
	108		6	
	111.a		2	1
	112			2
	uncertain			2
Qalā'ūn	121			1
	122			1
	125			14
	126			14
		126A (680 H.)		1
		126B (685 H.)		1
		126C (687 H.)		3
		126D (688 H.)		2
	127		41	
	131		9	5
	134			1
		135A		8
	137		1	
	uncertain		19	19
Khalīl	149		1	
		149A	11	
	150			1
	150 (Cairo)		4	
	151			2
	152			4
		152A		5
	uncertain		1	4
Kitbughā	158		20	5
	159		2	

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Ruler	*No. MSES*	*No. Additions*	*Number of specimens*	
			half dirhem	*dirhem*
Al-Nāṣir Muḥammad	212		2	
	uncertain			1
Undetermined early Baḥri			23	
		Total Mamlūk Issues	142	100

3. Hoard of 30 Dirhems from Syria

There is no record of acquisition of this hoard either. The period covered by the coins is rather long, ca. 90 years and starts with al-Nāṣir Muḥammad around 709 H. There is a fair distribution of coins for the entire Baḥri period and the last dirhems belong to al-Ẓāhir Barqūq, the first Burji Sultan, ca. 801 H. The long period of circulation here represented, a time during which many of the earlier issues must have become obsolete, and the even distribution of rulers, raises the possibility that this is a dealer's collection.

Ruler	*No. MSES*	*No. Additions*	*Number of specimens*
Al-Nāṣir Muḥammad	210		1
	uncertain		1
Al-Ṣāliḥ Ismāʿīl	277		1
	282		1
		282A (745 H.)	1
		282B (Tripoli)	1
Al-Muẓaffar Ḥājji I	310		1
Al-Nāṣir Ḥasan	367		1
Al-Ashraf Shaʿbān II	432		1
		432A (770 H.)	1
		432B (773 H.)	1
		432C	1

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Ruler	*No. MSES*	*No. Additions*	*Number of specimens*
	432? (uncertain)		2
	433–436		1
	uncertain		2
Al-Manṣūr ʿAlā al-Dīn ʿAli	495		1
Al-Ṣāliḥ Ḥājji II			
1st reign	516		2
2nd reign	530		1
		530A	1
Al-Ẓāhir Barqūq	551		1
	552		3
	552–553		3
		577A (793 H.)	1
		Total	30

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

NOTES ON SOME MAMLŪK DIRHEMS

(PLATE XXXVII)

HELEN W. MITCHELL

In a group of seventeen Mamlūk dirhems, recently acquired by the Ashmolean Museum, Oxford, a number of coins were noted which supplement the record of issues published in Paul Balog, *The Coinage of the Mamlūk Sultans of Egypt and Syria NS* 12 (New York, 1964).[1] No precise information is available about the provenance of these coins, but the former owner states that when they came into his possession they were all affected by an identical green corrosion and gave every appearance of having formed a hoard, or part of a hoard. Their dates fall within a period of about 75 years (ca. 670–748 H./A.D. 1271–1347) and of the coins with visible mint-names all but two are from the Syrian provinces of the Mamlūk Sultanate. The evidence therefore points to a deposition in Syria about the year 750 H.

Almost all the coins show the carelessness of striking that is a characteristic of Mamlūk silver coins from both Egyptian and Syrian mints. The area of the flan showing the impress of the die is sometimes as little as one-tenth of the total area (e.g., no. 1), the blank area of the obverse being exactly matched by the blank area of the reverse. Generally the blank area is an edge section (e.g., no. 6) but not infrequently it is to be found in the center of the coin (see no. 2, where a blank band crosses the flan from edge to edge, with well struck segments on either side of it).

BAḤRI MAMLŪKS

al-Ẓāhir Rukn al-Dīn Baybars I

658–676 H./A.D. 1260–1277

1. DAMASCUS, 670–676 H., *Silver*. (21, 2.63). Cf. *MSES*, nos. 51–54

but ornamentation different: العبايس. PLATE XXXVII.

[1] Paul Balog's article, "The Coinage of the Mamlūk Sultans: Additions and Corrections," which appears in this publication (pp. 113–171), includes references, at the appropriate places, to the new varieties and issues herein described.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

2. DAMASCUS THE WELL-GUARDED (دمشق المحروسة), ca. 665–675 H., month Ramadān, *Silver*. (25, 2.82). Cf. *MSES*, no. 63, but month unmistakable. PLATE XXXVII.

3. Mint missing (Cairo type), 672 H., *Silver*. (21, 2.56). *MSES*, no. 88.

al-Manṣūr Sayf al-Dīn Qalā'ūn
678–689 H./A.D. 1279–1290

4. CAIRO, 688 H., *Silver*. (21, 2.93). *MSES*, no. 125.

5. Mint missing (Damascus type), 688 H., *Silver*. (23, 2.66).

Margin:

R	B	L	T
//وستا	و ثمانين	ثمان/////	/////////

ω
الصالحى
V
السلطان الملك
المنصور سيف الدنيا و الدين
قلاون

لا اله الا الله
V V ب
محمد رسول الله
ارسله بالهدى

PLATE XXXVII.

The ornaments, if any, above the first line of the reverse are off the flan, together with the mint-name. On both sides the ornaments differ considerably from those described at *MSES*, no. 132. Note also different division of lines of obverse inscription: السلطان الملك | المنصور in place of المنصور | السلطان الملك.

6. Mint and date missing, *Silver*. (20, 3.21).

السلطا(ن الملك)
سيف
المنصور (الدنيا و الدين)
قلاون ضـ
خـ (؟) V

/////////
(محمد) رسول الله ار(سله)
(بال)هدى و دين ال(حق)
ليظهره على ال(دين كله)

PLATE XXXVII.

This coin is similar in many respects to the two coins included under *MSES*, no. 137 (= *BMC* 494, and the half-dirhem illustrated at *MSES*, pl. V), both of which show features which are not fully described. At the end of the third full line (the bottom line in the case

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of the half-dirhem) of the obverse, after the name قلاون, is the beginning of a word: not الصالحى as might be expected, but more resembling (ب)ضر, complete with a diacritical point for the ض. Immediately below it on the present coin (not visible on *BMC* 494) is خ also with a diacritical point. Only the discovery of a better specimen could confirm whether this is indeed an early example of the date appearing as part of the field inscription. If this should be the case, then this coin, which is evidently of Syrian minting, predates by thirty years the earliest published example in silver, al-Nāṣir Muḥammad's Ḥamāh dirhem of 715 H. (*MSES*, no. 204), where the date (without سنة) appears at the bottom of the field.

al-Nāṣir Nāṣir al-Dīn Muḥammad

1ST REIGN: 693–694 H./A.D. 1293–1294
2ND REIGN: 698–708 H./A.D. 1299–1309
3RD REIGN: 709–741 H./A.D. 1310–1341

7. DAMASCUS, 732 H., *Silver*. (23, 3.91).

لا اله الا الله
محمد رسول الله ارسله
بالهدى ودين الحق ضرب
بدمشق سنة اثنتين
وثلثين وسبعمائة

وما توفيق الا
بالله السلطان الملك
الناصر ناصر الدنيا والدين
محمد بن الملك المنصور
(قلاون)

PLATE XXXVII.

Unpublished date. The decade is written ثلثين, unlike *MSES*, no. 196, a coin of 734 H., where it would more accurately be transcribed ثلاثين.

8–9. ALEPPO, date missing (ca. 730–740 H.), *Silver*. (21, 2.35; 20, 3.37). Cf. *MSES*, nos. 199–203. From different dies.

10. ḤAMĀH, 704/7/9 H., *Silver*. (21, 2.97).

Top: ضرب بحماة Right:]ع وسبعمائة

(ودين) الحق
لا اله الا الله
محمد رسول الله
(ارسله بالهدى)

السلطان الملك
الناصر نا(صر الدنيا)
.....

PLATE XXXVII.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

It is unfortunate that the date of this unique coin is somewhat deficient. It ends perfectly distinctly وسبعمائة unlike some issues of the 730's from this mint, where the conjunction و is omitted (see below, no. 11 and *MSES*, nos. 207–209). Preceding this is one of the units ending in ع, making the date 704, 707 or 709. Since the comparative material is so slight it is impossible to speculate on the most likely date. No silver is known from al-Nāṣir Muḥammad's second reign, and of the coins with mint-names only three have legible dates: Cairo, *AV*, 69× and 707; Aleppo, *Æ*, 701. No coins are known in the name of al-Nāṣir Muḥammad for the year 709 H., although three months remained of the year after the abdication of Baybars II in Ramaḍān, when al-Nāṣir Muḥammad returned to Cairo from his exile in Syria to begin his third reign.

11. ḤAMĀH, 731 H., *Silver*. (21, 2.59).
As *MSES*, no. 204. As *MSES*, no. 204, but last line:
احد ثلثين سبعم[ائة
PLATE XXXVII.
Unpublished date. Note absence of و between elements of date.

12. Mint and date missing (Aleppo or Ḥamāh type), *Silver*. (20, 3.57).
Type as *MSES*, no. 199 (coin of Aleppo) but ornaments differ.

13. Uncertain. *Silver*. (13, 2.13).
Square dirhem, possibly of al-Nāṣir Muḥammad, mint and date off flan.

al-Ṣāliḥ ʿImād al-Dīn Ismāʿīl
743–746 H./A.D. 1342–1345

14. DAMASCUS, 745 H., *Silver*. (21, 3.26).
As *MSES*, no. 278.
اسمعيل
السلطان الملك
الصالح عماد الدنيا
والدين بن محمد ضرب
دمشق سنة خمس
واربعين
PLATE XXXVII.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Two issues should be distinguished for 745 H.: (a) with a six-line obverse inscription, giving the date سنة خمس واربعين, represented by the present specimen, another specimen in the Ashmolean Museum (ex Thorburn collection), and Lavoix[2] 857 and 859 (correcting the reading of the top line to اسمعيل); (b) that of *MSES*, no. 278, with a five-line obverse inscription ending سنة خمس.

Var. (a) should be placed before var. (b), since issues of 744 include the decade in the date, and issues of 746 do not.

15. TRIPOLI, date missing, *Silver*. (19, 2.38).

(ط)رابلس	.....
لا اله الا الله	السلطان الملك
محمد رسول الله	الصالح عماد الدنيا
ارسله بالهدى	(والدين اسمعيل)

PLATE XXXVII.

The engraving is very crude, and the flan much too small to accommodate the inscription in full. This specimen compliments no. 282B recorded above in Balog's "Additions," p. 137.

al-Muẓaffar Sayf al-Dīn Ḥājjī I
747–748 H./A.D. 1346–1347

16. Type of Damascus, 747 H., *Silver*. (21, 2.95).

As *MSES*, no. 307, overstruck with reverse of same.	As *MSES*, no. 307, overstruck with obverse of same.

17. DAMASCUS, 748 H., *Silver*. (21–25, 3.56).

As *MSES*, no. 307.

(حاجى)
(السلطان الملك)
المظفر سيف الدنيا و
الدين ابن محمد ضرب
دمشق سنة ثمان
واربعين

PLATE XXXVII.

[2] Henri Lavoix, *Catalogue des Monnaies Musulmanes de la Bibliothèque Nationale: Egypte et Syrie* (Paris, 1896).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Note the change, from issues of the previous year, in the fourth line of the obverse, where ابن محمد replaces ابن الملك الناصر; and note the rendering of سنة : ٮنه (with *iḥmāl*).

Only one other coin dated 748 is known, a dirhem from the Thorburn collection, now in the Ashmolean Museum. It was not previously available for inspection, and thus was not accurately described at *MSES*, no. 308. Since it is a clear specimen, differing in detail from the coin just described, its inscriptions are given here:

As *MSES*, no. 307.

حاجى
السلطان الملك
المظفر سيف الدنيا و
الدين ابن محمد ضرب
دمشق ثمان
واربعين

The date unit is written ثمان....

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE COINAGE OF LADAKH

(PLATE XXXVIII)

CHARLES K. PANISH

The district of Ladakh occupies the westerly portion of the Tibetan Plateau in the high Himalayas. It was governed since early times by its own ruler, who bore the Tibetan title *Gyalpo* (King). However, until the middle of the 17th century it was a dependency of Tibet, with which it shared a common language and religion. The people of Ladakh styled themselves *Bhots*, from which their country came to be called *Botaan* (بتان in Persian) by their neighbors to the west.

In 1664 Ladakh became subject to Kashmir, at that time a province of the Moghul Empire of India. Thenceforth the history of Ladakh was essentially the history of Kashmir. In 1681 Tibet invaded Ladakh to settle a religious difference, but Moghul troops soon restored the territorial integrity of the area. The terms of the treaty of 1683, which terminated this almost forgotten war, required the king of Ladakh to embrace Islam and to strike coins in the name of the Moghul Emperor. No coin of this type is extant, and it is doubtful that any were ever struck.

In 1747 the Doghra Rajput ruler of Jammu, Ranjit Deo (A.D. 1742–1780), declared himself independent of Moghul rule. But his independence was short-lived, since in the very next year he offered his fealty to Aḥmad Shāh Durrani, the Afghan ruler who invaded India eight times and made its northwest region an Afghan dependency. Kashmir was formally annexed to Afghanistan in 1752, and with it went Jammu and Ladakh.

Aḥmad Shāh died in 1772 and was succeeded by his son Timur Shāh. In 1776 Timur appointed a new governor of Kashmir and Ladakh, Haji Karimdad Khan, who ruled until 1783. It appears that Karimdad Khan was the first one to issue a coin especially for Ladakh. This undoubtedly was minted at Srinagar, the provincial capital.

This coin is a thin silver piece with a garbled inscription in debased Persian. The only readable portion of the legend is *zarb-i-Botaan* (struck in Ladakh) on the reverse. However, certain early specimens

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of this coin in the British Museum have a date on the obverse, the earliest of which is either 1185 H./A.D. 1771 or 1189 (PLATE XXXVIII, 1).[1] According to Cunningham[2] the coin of Ladakh was called locally a *jud* or *joa*; but Prinsep[3] called it a *ti-masha* (i.e., three mashas) and listed its weight as 40 grains (2.59 gr.), composed of 969-fine silver. The coin had a nominal exchange value of one-quarter Indian rupee or four annas. Currently available specimens of this coin vary in weight from 2.68 gr. for the earliest issues to somewhat less than 2.50 gr. for the later ones.

Timur Shāh's death in 1793 set off an Afghan power struggle, first when three of his twenty-three sons fought for the throne, and later when the rival Barakzai family displaced the Durrani from their position of paramount power. During this period, control of Kashmir also was disputed between Afghans and Sikhs. In 1805, when the Afghans had temporarily prevailed, Ata Muḥammad Khan was appointed governor of Kashmir. But in 1808, taking advantage of the tumultuous times, he declared his independence. Despite all these uphheavals the Ladakh *ti-masha* continued to be issued with little change; although by now it was undated and its inscription further debased (PLATE XXXVIII, 2).[4]

Ṃahmud Shāh, a son of Timur Shāh, came to the Afghan throne for a second time in 1809. Four years later he dispatched an expedition to Kashmir to bring to heel the recalcitrant Ata Muḥammad Khan. This was accomplished in February, 1813, when Muḥammad Azim Khan (A.D. 1813–1819) superceded the incumbent as governor of Kashmir. A new issue of the Ladakh *ti-masha* took place about this time. The new coin had substantially the same debased reverse as before, but the obverse was now inscribed *Maḥmud Shāh* in recognition of the new sovereign. The coins of this issue range in weight from 2.5 to 2.2 gr., and again apparently are undated (PLATE XXXVIII, 3).

[1] Mr. Lowick kindly provided me with a cast of the BM specimen illustrated.
[2] Alexander Cunningham, *Ladak, Physical, Statistical, and Historical; with Notes on the Surrounding Countries* (London, 1854), p. 254.
[3] James Prinsep, *Useful Tables* (London, 1834), p. 49.
[4] The undated issues inscribed بوتہ have been previously assigned to Bhutan, no doubt because of the homonymic relation between the Persian *Botaan* and the English *Bhutan;* see C. J. Rodgers, *Coins of the Indian Museum*, Part III, *Miscellaneous Coins* (Calcutta, 1895), p. 117 and A. W. Botham, *Catalogue of the Provincial Coin Cabinet, Assam* (Allahabad, 1930), p. 572.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A fourth issue of Ladakhi *ti-masha* appeared within a few years. The new piece retained the same *Mahmud Shāh* obverse as before, but had a modified reverse on which the *zarb-i-Botaan* was inscribed around a *katar*, or Rajput hand-dagger, in the center of the flan. This coin weighed about 2.2 gr., and again was undated (PLATE XXXVIII, 4).

In 1819, Kashmir with its dependencies was wrested from the Afghans by the Sikh Maharaja Ranjit Singh (A.D. 1805–1839), who conferred the fief of Jammu on the family of Gulab Singh. The latter was a Doghra Rajput who had earlier attached himself to the Sikh Durbar, and who had placed a claim on Jammu based on the assertion that he was a grand-nephew of Ranjit Deo, the erstwhile Jammu chief. Gulab Singh lost no time in reasserting Jammu's earlier claims to the district of Ladakh, which he occupied in 1834 in the name of his sovereign, Ranjit Singh.

In 1839, on the death of Ranjit Singh, Gulab Singh declared Jammu an independent State, including Ladakh within its borders. In 1846, the British recognized Gulab Singh as Maharaja of Kashmir and Jammu (including Ladakh). He thereupon adopted the grandiose title *Sri Maharaj Sahib Raja-i-Rajagan Raja Sahib Bahadur*, and issued a coin in his own name. Gulab's new coin was a Ladakh issue. Consistent with precedent, it retained without substantial change the reverse of the previous Afghan issue, *zarb-i-Botaan* inscribed in Persian around a *katar*. The obverse, however, was completely new, being now inscribed in Nagari script, *Raja Gulab Singh*. This coin, like its Afghan predecessor, was undated. It might have been issued as early as 1839, but more likely in 1846 on Gulab's accession. As might be expected, inflationary pressures prompted a decrease in the weight of the new coin, specimens now observed varying from 1.8 to 2.2 gr. Because of the number of these coins now encountered, it may be inferred that they were issued over Gulab's entire reign until his death in 1857. These coins are found with at least two minor variations in the *katar* on the reverse (PLATE XXXVIII, 5a, b).

Gulab's son and successor was Ranbir Singh (A.D. 1857–1885) who issued a now rare silver *ti-masha* for Ladakh weighing 1.8 to 2.0 gr. The obverse reads, in Persian, "Struck in Ladakh in the Kingdom

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of Jammu in the year 1928" (i.e., A.D. 1871). The reverse reads, in Tibetan, "Struck in Jammu 1928" (PLATE XXXVIII, 6).[5]

Ranbir also struck copper *paisa* for Ladakh dated Samvat 1924 to 1931 (A.D. 1867–1874). These were inscribed in Persian on the obverse and in Nagari on the reverse: "Sri Gajadharji Saha Jarbi (an epithet of Vishnu) Ladakh in the Empire of Jammu" (PLATE XXXVIII, 7).[6] These were the last coins issued for Ladakh. The Doghras continued to issue coins for Kashmir and Jammu until 1883 and 1891 respectively, at which dates Indian currency became the sole medium of exchange.

Why a special coinage was considered necessary for a place as obscure as Ladakh is not readily apparent. However, a clue is provided by a related coinage. From about 1759 to 1816 the district of Garhwal, lying south and slightly east of Ladakh in the present Indian State of Uttar Pradesh, also issued silver *ti-masha* similar in weight and fabric to the coins issued for Ladakh. No other localities seem to have issued this type of coin. It would scarcely seem a coincidence that both localities were heavily engaged in the lucrative wool trade with Tibet, and that both issued a type of coin which closely corresponded in value to the half-sho denomination of Tibet. The *ti-masha* therefore probably served as a trade coin at the Tibetan border.

[5] This issue is, to my knowledge, unpublished.

[6] Several varieties of this issue have been published by W. H. Valentine, *The Copper Coins of India*, Part II (London [1914]), pp. 254–255.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

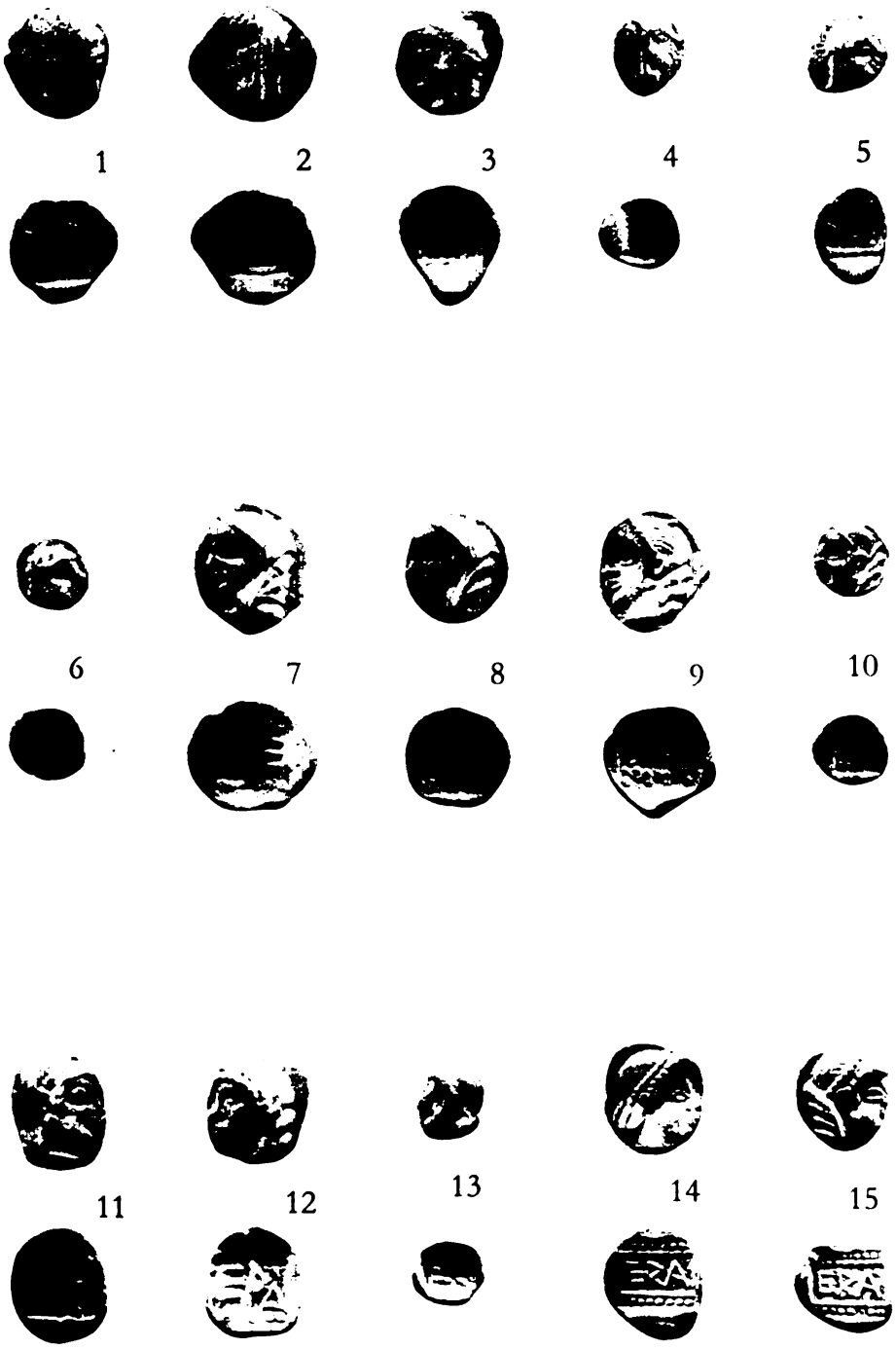
Plates

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN



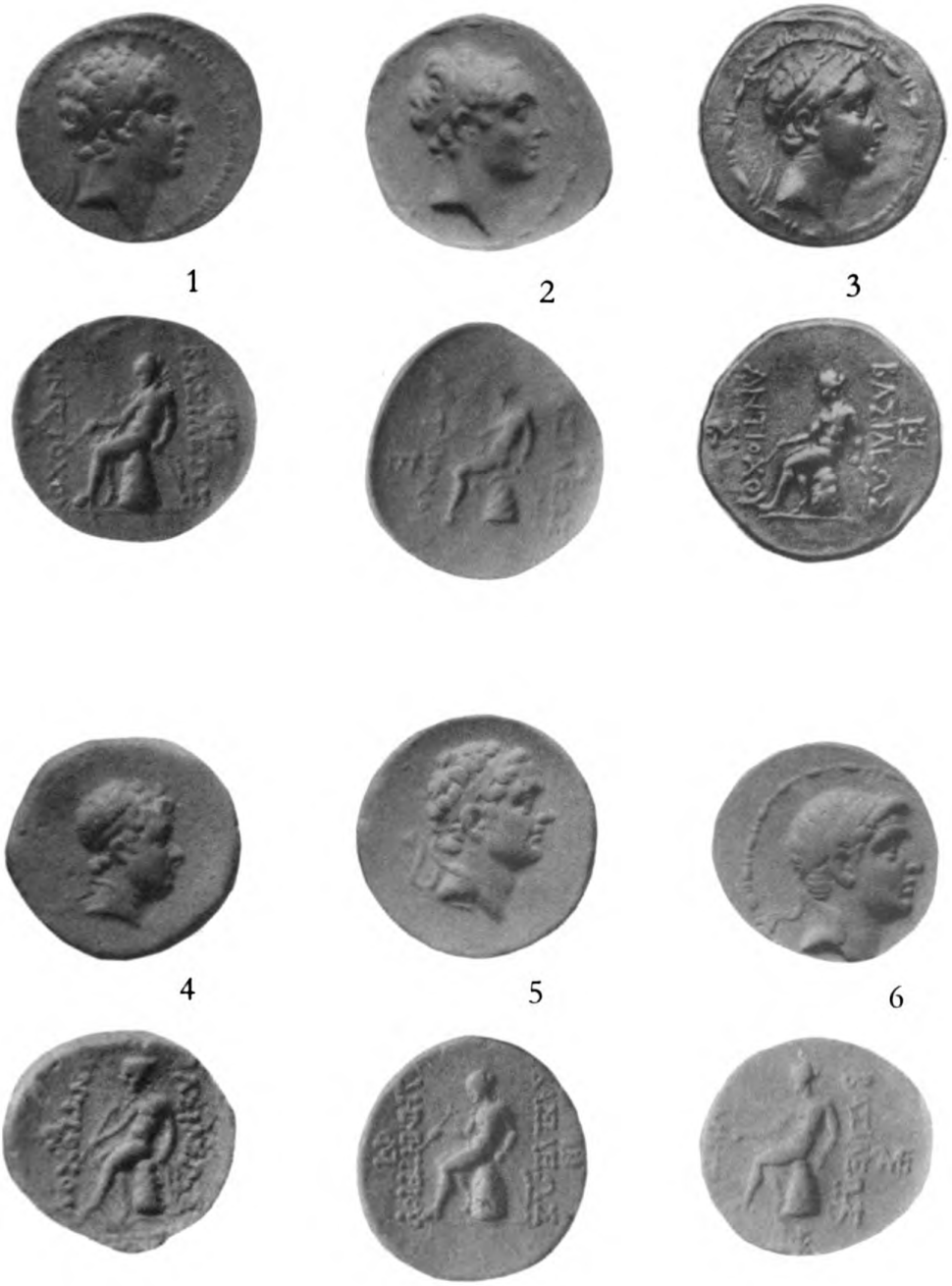
ARCHAIC COINAGE OF ARCADIAN HERAEA

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



SELEUCID MINT AT ANTIOCHIA

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



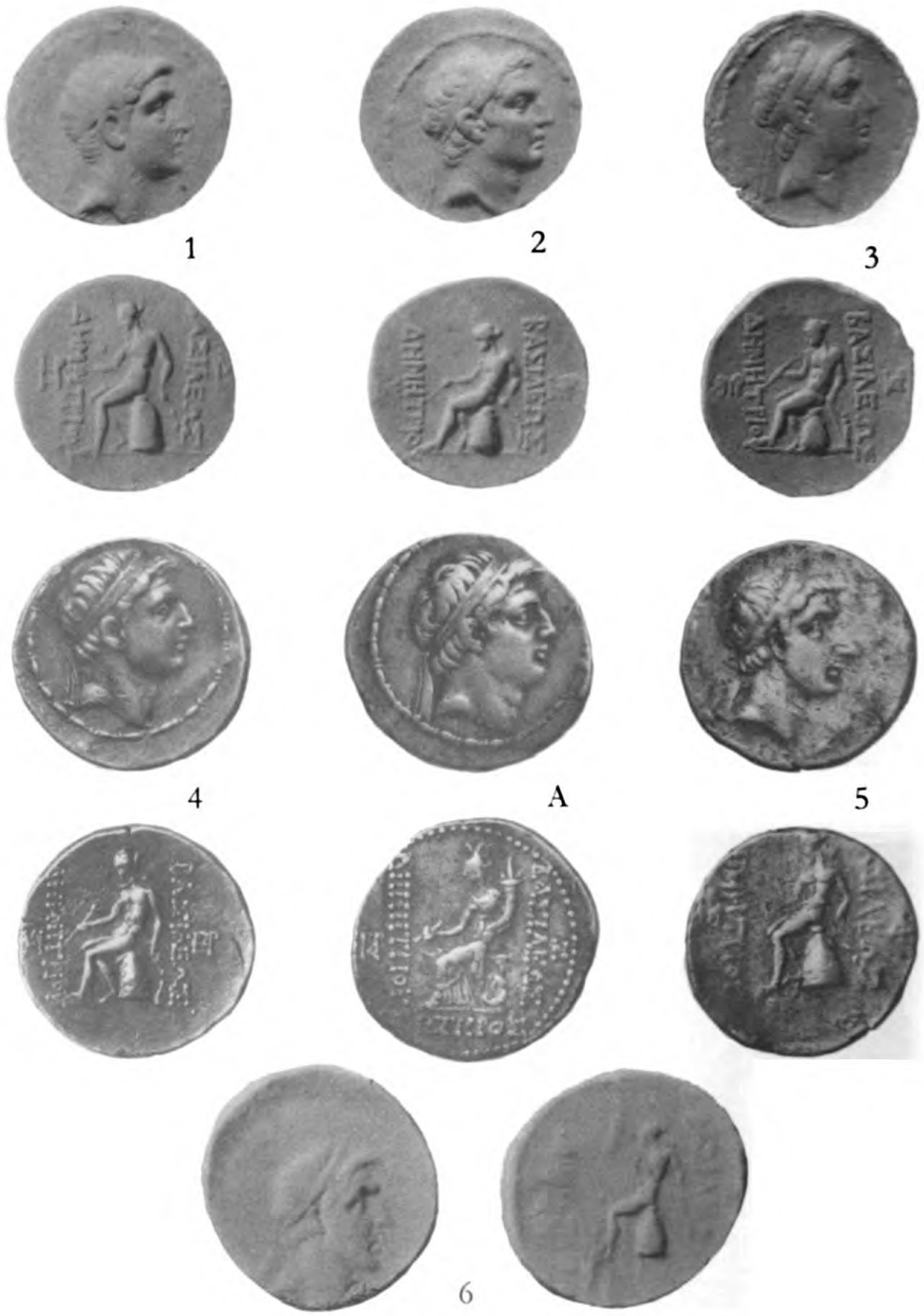
1 2 3

4 5 6

SELEUCID MINT AT ANTIOCHIA

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

IV



SELEUCID MINT AT ANTIOCHIA

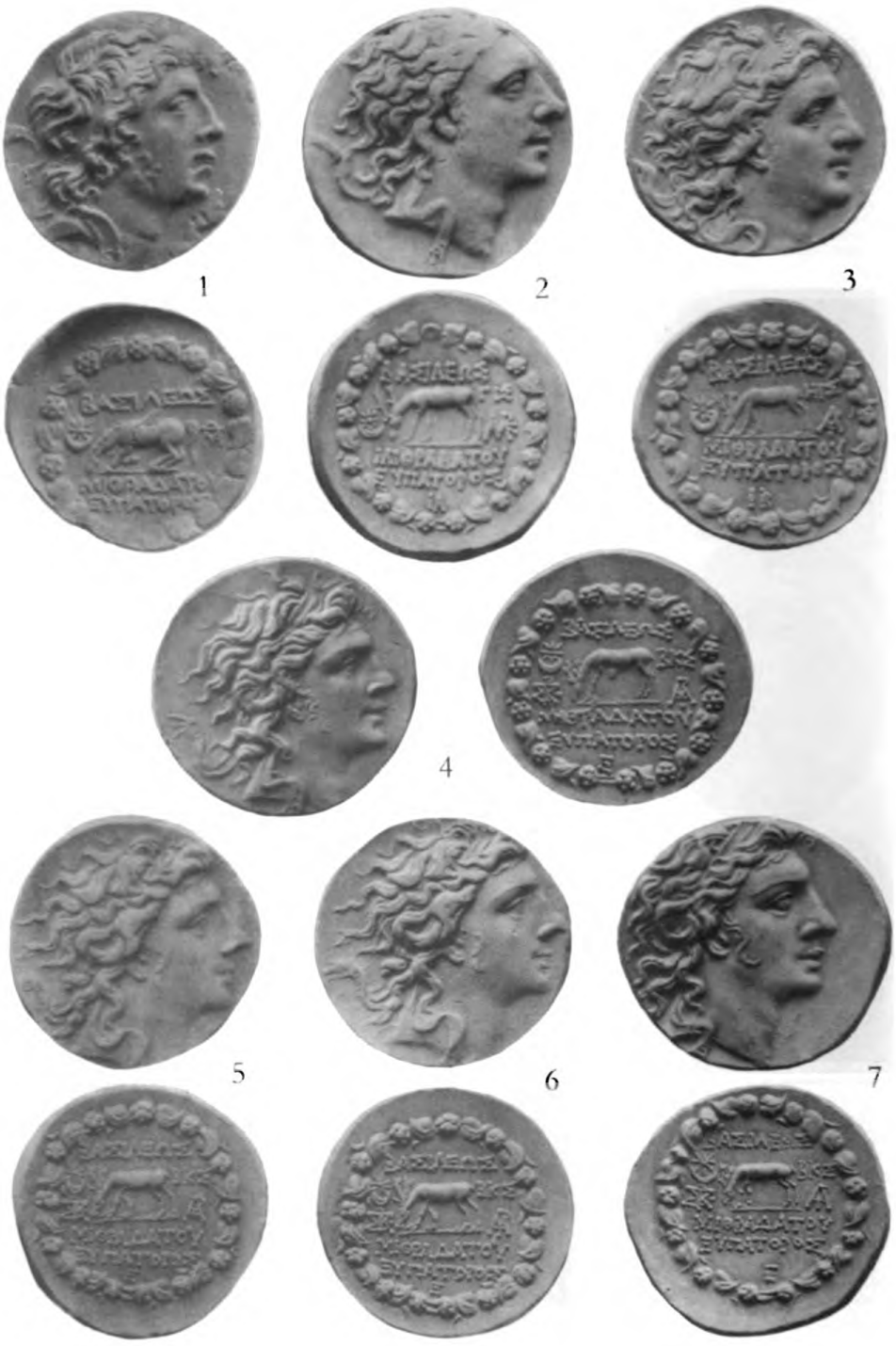
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



1 2 3 4 5 6 7

SELEUCID MINT AT ANTIOCHIA

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



8 9 10 11 12 13 14

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



15 16 17



18 19 20

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



21 22 23



24 25 26

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



27 28 29



30 31 32

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



33 34 35



36 37 38

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



40



41







42



43



44







BITHYNIAN HOARD

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



15 16 17



18 19 20

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



21 22 23



24 25 26

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



27 28 29



30 31 32

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



33 34 35



36 37 38

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



39 A

B C

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



40



41







42



43



44







BITHYNIAN HOARD

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



45 46

47 48 49

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



50 51 52 53 54

BITHYNIAN HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



1

2

3

4

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



5



6



7 8 9





10

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



11



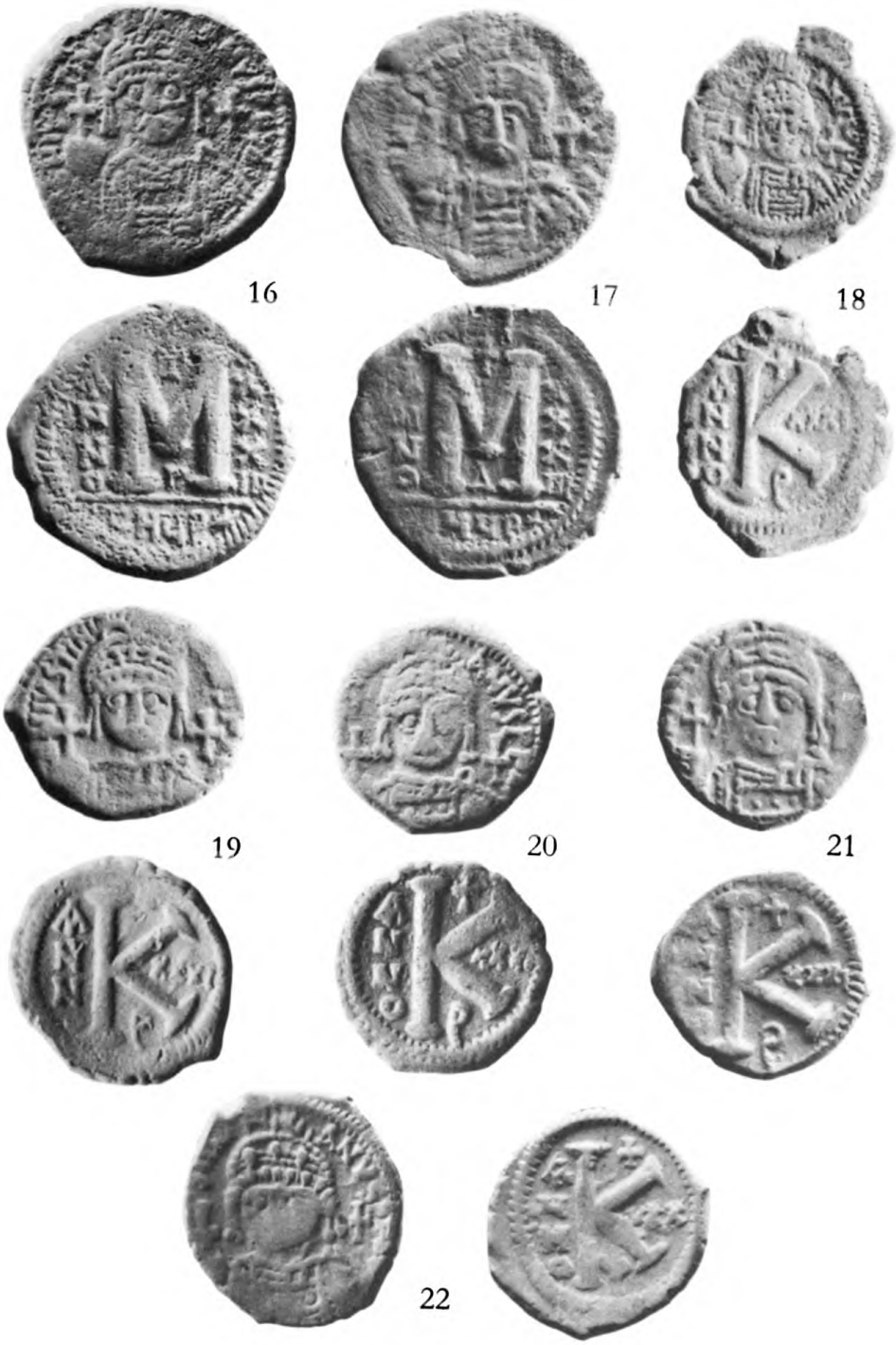
12 13 14





15

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



16 17 18

19 20 21

22

BYZANTINE NOTES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



23



24



25









26



27



28









30





29



30

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



31



32



33









34



36



35







Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



1



2



3 4

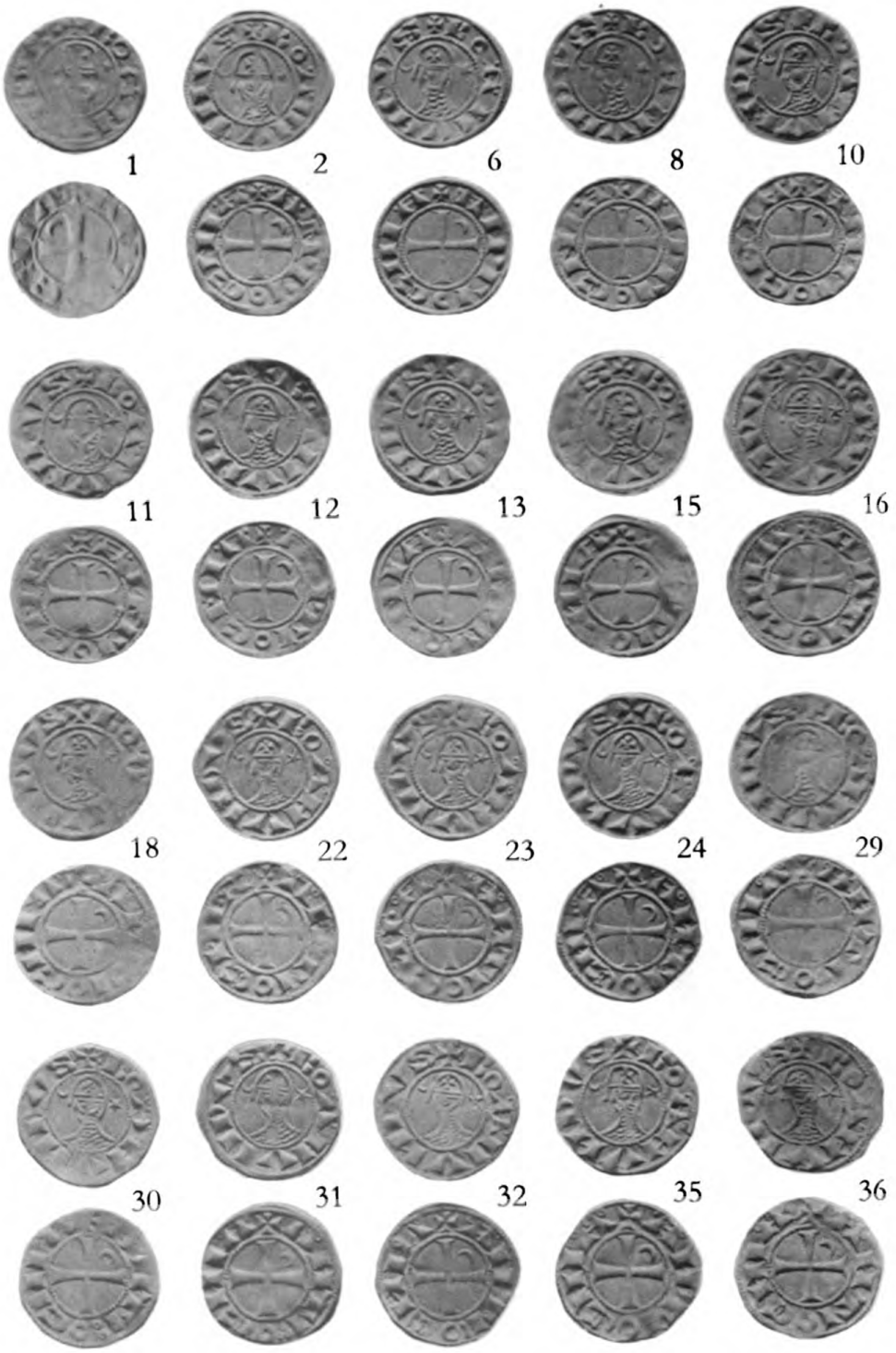


5



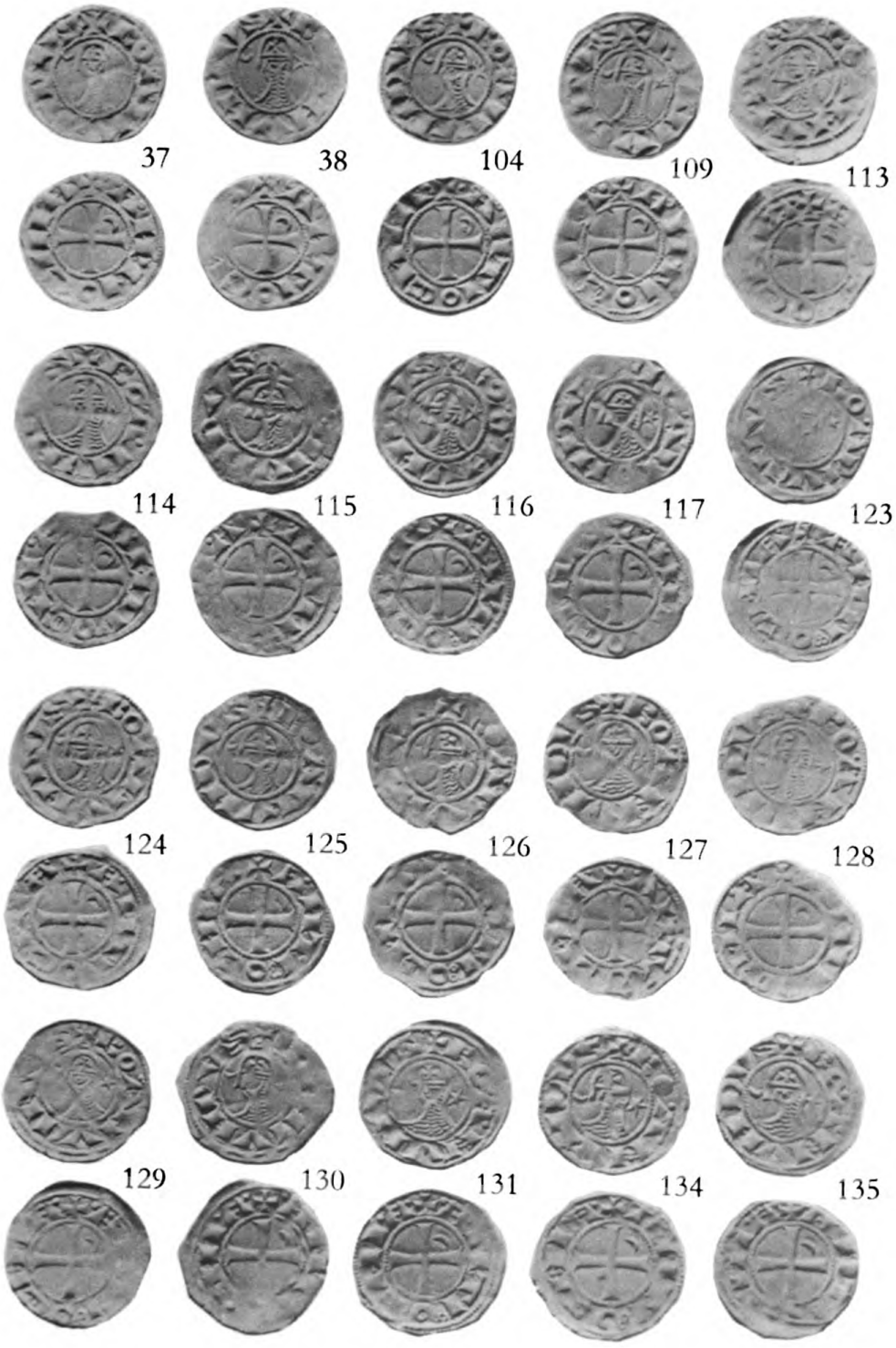
6

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



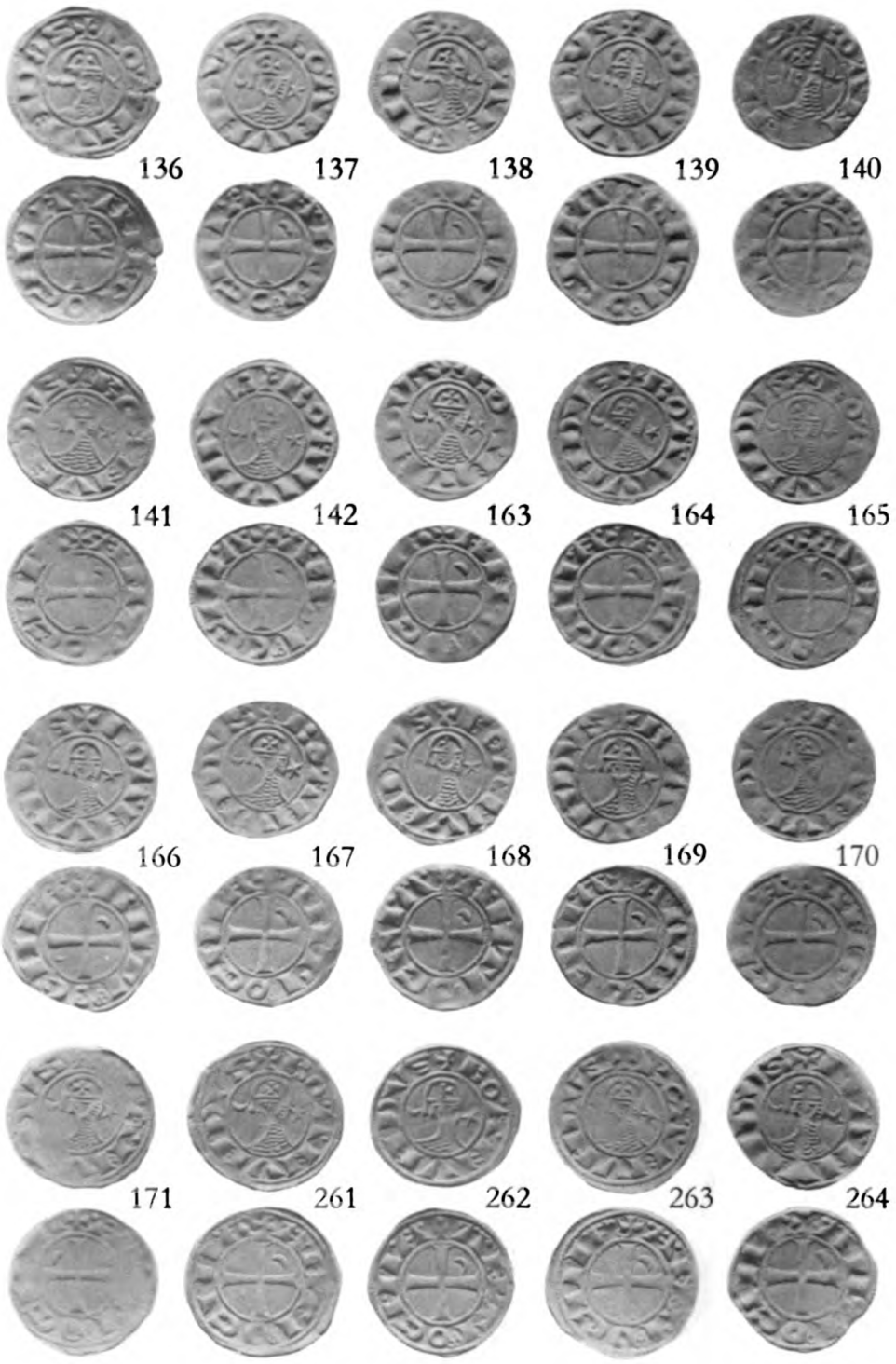
MAĞARACIK HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



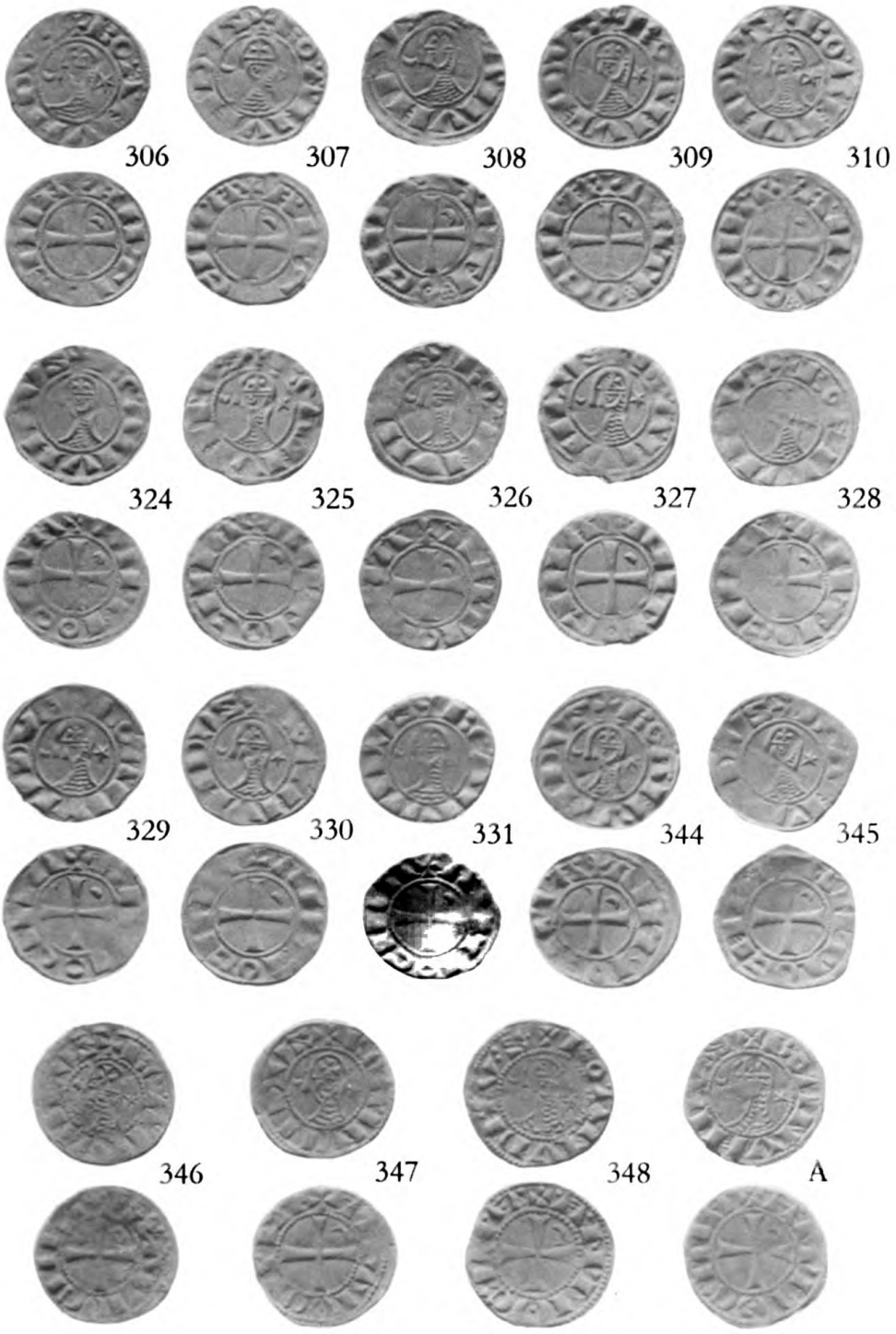
MAĞARACIK HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



MAĞARACIK HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



MAĞARACIK HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



1

BĀLIS: A NEW ṬŪLŪNID MINT



39 39A/1 39A/2 102A

103A 139A 140A 141A

141B 141C

COINAGE OF THE MAMLŪK SULTANS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



COINAGE OF THE MAMLŪK SULTANS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



COINAGE OF THE MAMLŪK SULTANS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

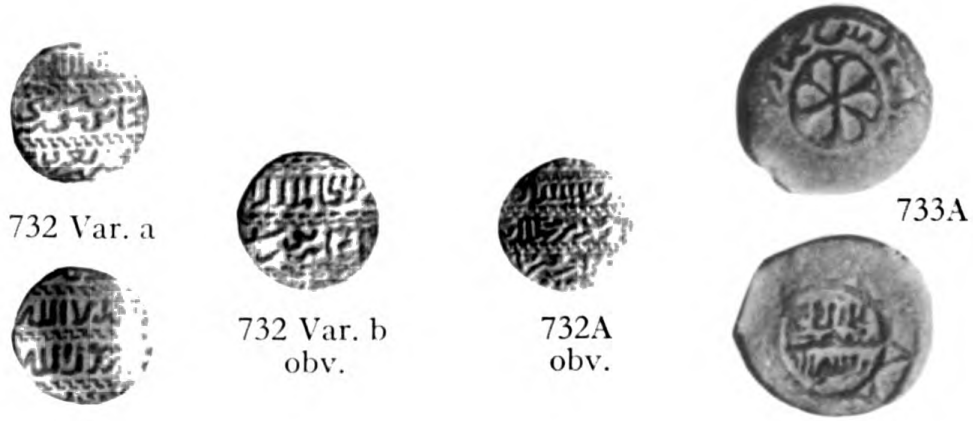


COINAGE OF THE MAMLŪK SULTANS

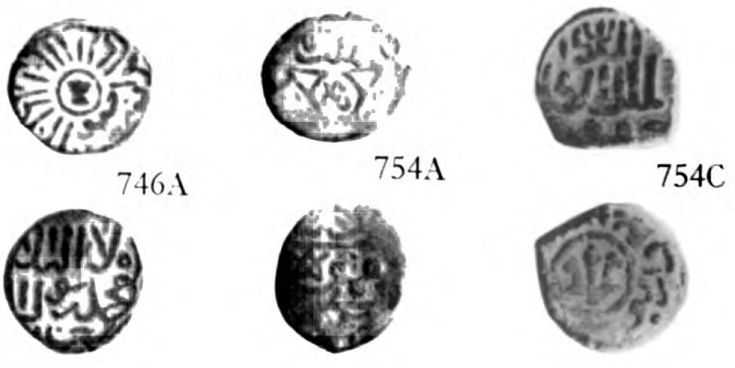
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



713A 715A 719C 729A



732 Var. a 732 Var. b obv. 732A obv. 733A

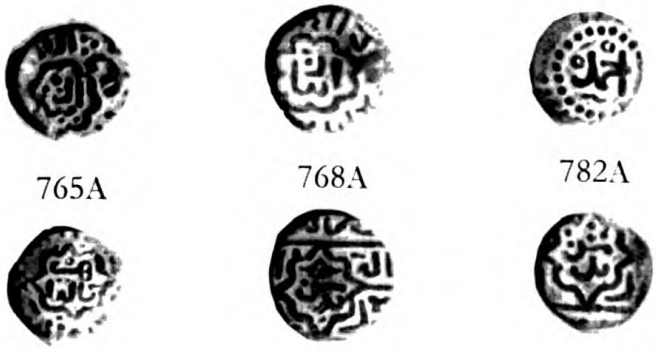


746A 754A 754C

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



754D . 754E 759A 759B



765A 768A 782A



800A 800B 812A 816A

COINAGE OF THE MAMLŪK SULTANS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



845A/1



845A/2







849A/1



849A/2



858A



861



892A













902A



905B



905C/1

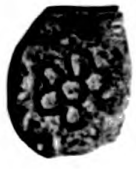


905C/2





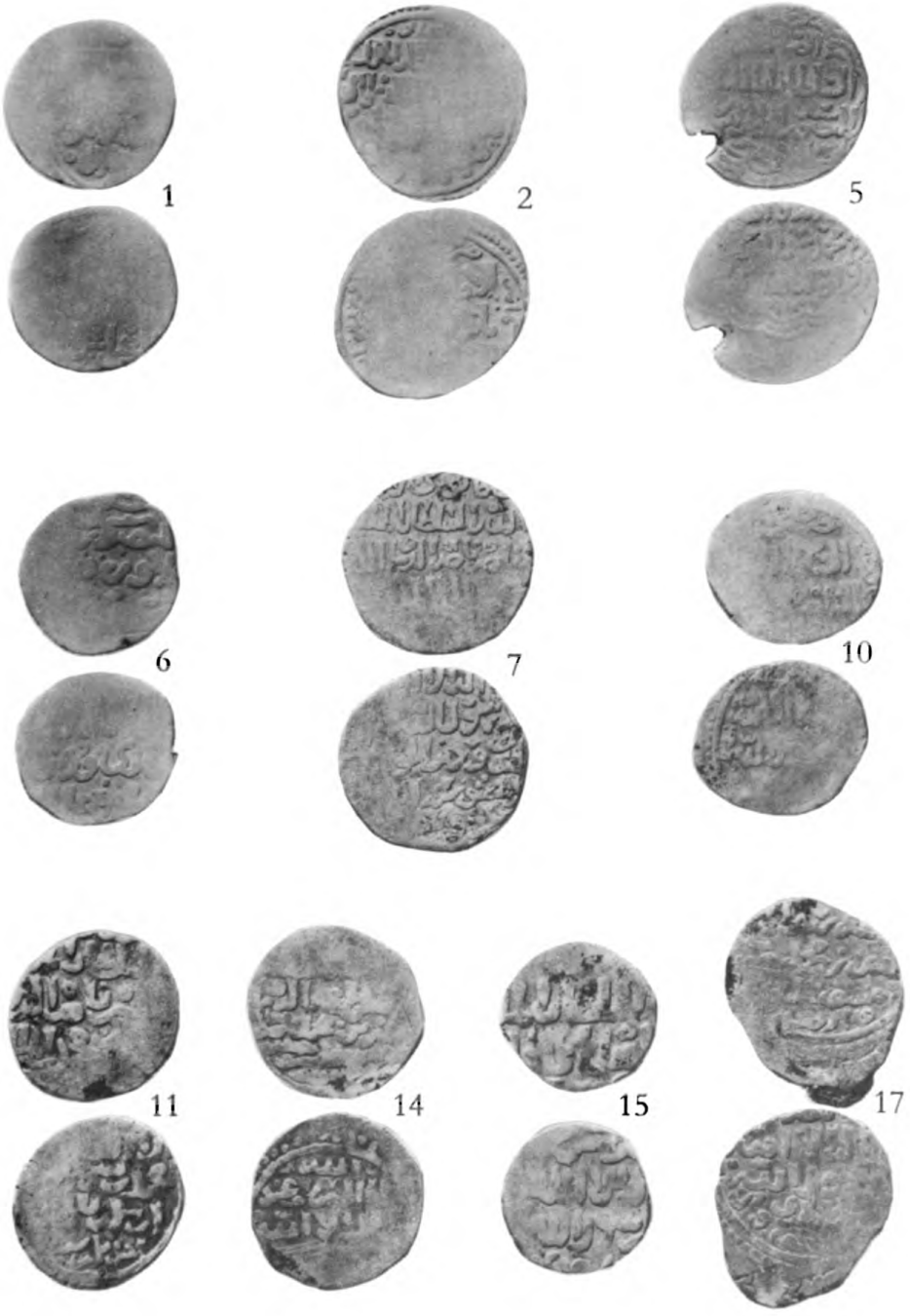




Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



1 2 3

4

5a 5b 6

7

COINAGE OF LADAKH

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

C J
C 67

THE AMERICAN NUMISMATIC SOCIETY

MUSEUM NOTES

17



THE AMERICAN NUMISMATIC SOCIETY
NEW YORK
1971

Digitized by Google
Original from
UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE AMERICAN NUMISMATIC SOCIETY

Founded 1858 · Incorporated 1865

BROADWAY BETWEEN 155TH & 156TH STREETS
NEW YORK, N.Y., 10032

PURPOSES: The Society was founded for the collection and preservation of coins, medals, decorations and paper money and for the investigation of their history and other subjects connected therewith.

MEMBERSHIP: Applications for membership are welcomed from all interested in numismatics. Inquiries regarding membership should be addressed to the Secretary of the Society.

DUES: The annual dues for an Associate Membership are $15.00. Issues of the *Notes and Monographs*, *Museum Notes* and *Numismatic Literature* are distributed to all members.

PUBLICATIONS: The *Numismatic Notes and Monographs* consist of separately issued publications, each on a single topic, of which usually several appear each year. *The American Numismatic Society Museum Notes* is a publication, irregular in appearance, consisting of brief notes and papers, principally on items in the Society's collections. *Numismatic Literature*, published twice each year, lists current numismatic publications with abstracts of their content. *Numismatic Studies* is a series accommodating works in a larger format.

MUSEUM: The Society maintains a museum located in uptown Manhattan, New York City, which houses its offices, collections and library. Collections embrace coins of all periods from their inception to modern times, medals and decorations. Selections from its cabinets are on display in an exhibition. The library, consisting of about 20,000 volumes, covers all branches of numismatics.

The museum is open to Members and the public from 9 A.M. to 5 P.M. on Tuesdays, Wednesdays, Thursdays, Fridays and Saturdays. In addition, the public exhibition is open on Sundays from 1 to 4 P.M. The museum is closed on Mondays and the following holidays: New Year's Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Election Day, Thanksgiving Day, the fourth Friday in November, the fourth Saturday in November, December 24, Christmas Day. The public exhibition is open from 10 A.M. to 5 P.M. on the fourth Friday and the fourth Saturday of November.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE AMERICAN NUMISMATIC SOCIETY

MUSEUM NOTES

17

THE AMERICAN NUMISMATIC SOCIETY
NEW YORK
1971

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

ALL RIGHTS RESERVED BY
THE AMERICAN NUMISMATIC SOCIETY

PRINTED IN GERMANY AT J. J. AUGUSTIN · GLÜCKSTADT

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

CONTENTS

GREEK

R. Ross Holloway. An Archaic Hoard from Crete and the Early Aeginetan Coinage 1

Philip P. Betancourt. A Hoard of Bronze Coins from Erythrae 23

Hyla A. Troxell. The Peloponnesian Alexanders 41

Fred S. Kleiner. The Alexander Tetradrachms of Pergamum and Rhodes 95

J. R. Jones. Some Numismatic Problems in the Delian Inscriptions 127

Paul Z. Bedoukian. Coinage of the Later Artaxiads 137

ROMAN AND BYZANTINE

George E. Bates. Constans II or Heraclonas? An Analysis of the Constantinopolitan Folles of Constans II 141

George C. Miles. Coins from the Excavations at Ag. Petros, Herakleion, Crete 163

MEDIAEVAL

D. M. Metcalf. The Pylia Hoard: Deniers Tournois of Frankish Greece 173

ORIENTAL

George C. Miles. Additions to Zambaur's *Münzprägungen des Islams* 229

Samir Shamma. A Hoard of Fourth Century Dinars from Yemen 235

Stephen Album. An Umayyad Hoard from Afghanistan 241

Charles K. Panish. Early Coinage of Bhutan 247

MODERN

Theodore V. Buttrey, Jr. The Hermosillo Peso of 1839 255

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

AN ARCHAIC HOARD FROM CRETE AND THE EARLY AEGINETAN COINAGE

(PLATES I–VIII)

R. ROSS HOLLOWAY

In 1943 a hoard of early Greek coins, with one exception issues of Aegina, was found near Matala in Crete. It was acquired at once by the late T. J. Dunbabin, who was then engaged in guerilla operations on the German-held island. Sixty-nine coins from the hoard are preserved in the Ashmolean Museum, Oxford, together with casts of two Aeginetan staters (nos. 69 and 70) destroyed in chemical analysis.

A close analysis of this hoard, in conjunction with other published hoards, provides the basis for refining the conclusions of W. L. Brown regarding the foundation and early development of the Aeginetan mint.[1]

The inventory of the Dunbabin Hoard is as follows.

THERA[2]

Obv.: Two dolphins swimming in opposite directions, the upper one to l.
Rev.: Incuse "Union Jack" pattern (worn).
12.12 gr. (PLATE VI, 1).

[1] "Pheidon's Alleged Aeginetan Coinage," *NC* 1950, pp. 177–204. The present article is based on my doctoral dissertation "The Elder Turtles of Aegina" presented to Princeton University, 1960 (University Microfilms Inc., Ann Arbor, L. C. Card *Mic.* 60–5000). The writing of the dissertation was supported by a predoctoral fellowship of the American Numismatic Society and by a Princeton University Proctor Fellowship and my subsequent work has benefitted from a grant of the Penrose Fund of the American Philosophical Society. I am grateful to the curators and collectors who have so readily supplied me with information regarding both coins cited in this article and others used only in my dissertation. In connection with the Dunbabin Hoard I am particularly indebted to the kindness of Dr. C. H. V. Sutherland and Dr. C. M. Kraay, and for other courtesies to Prof. Paul Naster.

[2] For the attribution of this type to Thera see K. Regling, *ZfN* 1906, p. 41 and 1927, p. 89, note 1. C. T. Seltman's argument for Megara (*NC* 1926, pp. 139f.) is highly questionable.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

AEGINA

Obv.: Aeginetan turtle with a single line of buttons on the shell, at the anterior end of which, a thin collar; flippers variously thin and wiry to short and substantial.

Rev.: Incuse pattern, either "Union Jack" ■, or "staggered triangles" ⯑ (or variations), or "mill sail" ✠.

1.[3] 11.99 gr.
2. 12.17 gr.
3. 12.29 gr.
4. 12.40 gr.
5. 12.08 gr.
6. 12.22 gr. (same obv. die as 5).[4]
7. 12.21 gr.
8. 11.80 gr.
9. 11.96 gr. (same obv. die as 8).
10. 12.23 gr.
11. 12.08 gr.
12. 12.57 gr. (same obv. and rev. dies as 11).
13. 12.19 gr.
14. 12.18 gr. (same obv. die as 13).
15. 12.37 gr.
16. 12.22 gr.
17. 12.21 gr.
18. 11.94 gr.
19. 12.14 gr.
20. 12.37 gr.
21. 12.00 gr.
22. 12.22 gr.
23. 12.35 gr. (same obv. die as 22).
24. 11.57 gr.
25. 12.27 gr.
26. 12.06 gr.
27. 11.98 gr.
28. 12.19 gr.
29. 11.88 gr.
30. 12.27 gr.
31. 12.39 gr.
32. 12.09 gr.
33. 12.24 gr.
34. 12.06 gr.
35. 11.68 gr.
36. 11.24 gr.
37. 11.99 gr.
38. 12.04 gr.
39. 12.19 gr.
40. 12.05 gr.
41. 12.26 gr.
42. 11.82 gr.
43. 12.18 gr.
44. 12.26 gr.
45. 13.13 gr.
46. 11.23 gr.
47. 12.09 gr.
48. 11.73 gr.
49. 12.01 gr.
50. 12.09 gr.
51. 11.72 gr.
52. 12.48 gr.
53. 12.02 gr.

[3] All the coins are somewhat worn; all are illustrated in the plates.
[4] I am grateful for Dr. C. M. Kraay's opinion regarding the six die identities noted for the Dunbabin Hoard.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

54. 12.23 gr.
55. 12.11 gr.
56. 12.32 gr.
57. 12.02 gr.
58. 12.47 gr.
59. 11.27 gr.
60. 12.31 gr.
61. 12.39 gr.
62. 12.23 gr.
63. 11.89 gr.
64. 12.25 gr.
65. 12.02 gr.
66. 12.05 gr.
67. 12.28 gr.
68. 12.22 gr.

Dunbabin did not see the vase which held the hoard, but from a description of it provided by the finder, he was able to identify it as an *olpe* of a type belonging to the mid-sixth century.[5] A firm upper limit of ca. 550 is therefore set for the burial of the hoard. This provides an element of absolute chronology lacking in Brown's scheme at this point. His Class 2, to which all of the Dunbabin Aeginetan staters belong,[6] is only vaguely dated, particularly with regard to its beginning. He did, however, estimate that the class covered most, if not all, of the sixth century.

Brown's system for determining the chronology of the Aeginetan coinage was based almost entirely on the development of the incuse reverse as opposed to earlier studies which had used the rendering of the turtle obverses as the criterion. Brown was the first to point out a unique incuse reverse which is more like the reverses of the early Ionian electrum than other punches of the Aeginetan series. This reverse is known from two staters, both in England, which also share a common obverse die.[7] These two coins, which appear to be part of the earliest known issue of the Aeginetan mint, formed Brown's Class 1. The coins of the Dunbabin hoard are typical of Brown's Class 2 which included all the Union Jack, staggered triangles, and mill sail reverses. As his Class 3, a sub-group, Brown recognized a reverse of six segments, marked by three rather than four intersecting lines, which he regarded as an early experiment to

[5] I am indebted for these details to Dr. C. M. Kraay in a letter dated December 1, 1958. Brown stated, evidently erroneously, that the container was "an Attic pot of *c.* 525," *NC* 1950, p. 186.
[6] Brown had seen the Dunbabin coins, *NC* 1950, p. 186 and p. 201, note 38.
[7] BM, 12.11 gr., *NC* 1950, pl. XI, 1; Ashmolean, 11.73 gr., PLATE VI, 2,

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

improve the Union Jack pattern.[8] Brown's Class 4 was the small skew reverse.[9] This, he felt, was soon replaced by the large skew, certainly the latest form of the archaic Aeginetan incuse since it is found both with the handsome "T-back turtles," so called because of the T pattern of dots on their shells,[10] and with the first of the "tortoises" which replaced the turtles during the fifth century.[11]

In addition to his important discovery of the Class 1 coins, Brown also discerned that the condition of the reverse around the incuse was a criterion of date. The small punches of Class 1 and early Class 2 left the surface around the incuse in the uneven state of the original flan. The later punches of Class 2 and the punches of all subsequent classes were apparently set on a wide platform which flattened out the surface of the reverse around the depression caused by the punch.

Brown's study is particularly valuable for the question of absolute chronology. Using the late archaic hoards, particularly the Egyptian finds, Brown pointed out quite rightly that none of the published hoards was earlier than the last quarter of the sixth century (and with the possible exception of the Dunbabin Hoard and the long neglected Cyclades Hoard discussed below, this is still true).[12] The hoard evidence showed that the skew reverse, even in its early form (Class 4) did not appear before about 490. Classes 2 and 3 were therefore issues of the sixth century.

[8] *NC* 1950, pl. XI, 3. Class 3 is undoubtedly ephemeral. Among the 1067 archaic Aeginetan staters which I have studied, I observed only two reverses with this peculiar six segmented reverse. These coins belong to the oddities of Class 2.
[9] E.g., Ashmolean, 11.69 gr., PLATE VI, 3.
[10] E.g., Baltimore, Johns Hopkins University, 12.39 gr., PLATE VI, 4.
[11] E.g., Fitzwilliam *SNGLeake* 3285, 12.38 gr., PLATE VI, 5.
[12] The hoard evidence cited by Brown may be supplemented by the following: (1) Persepolis: Basis deposit of the palace of Darius I, E. F. Schmidt, *Persepolis II* (Chicago, 1957) pp. 110–114; (2) Demanhur Hoard: Brown's date, ca. 490, is supported by R. R. Holloway's study of the early Naxian series, "The Crown of Naxos," *ANSMN* 10 (1962), pp. 1–8; (3) A hoard from Egypt published in *Seaby's Coin and Medal Bulletin* no. 500 (1960), pp. 9–10, includes 3 Aeginetan staters (one clipped) all of which belong to the thin collar turtle type of Brown's Class 2, thus resembling closely the coins of the Dunbabin Hoard. Coins of Chios and Paphos date the burial of the hoard to the 480's; (4) Taranto Hoard: see below, note 17; (5) Isthmian Sanctuary of Poseidon: coins sealed in debris of the archaic temple, which was destroyed by fire in the mid 470's, preliminary report by O. Broneer, *Hesperia* 1955, pp. 135–136 and pl. 53.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

For Class 1 and the beginning of Class 2 there was no hoard evidence. Brown allowed that Class 1 could be earlier, though only slightly earlier, than the year 600, but this estimate rested only on the ancient tradition that Solon's economic reforms at Athens had dealt with coinage and in particular with the substitution of the lighter Athenian drachm for the heavier Aeginetan coin. This view has been corrected by C. M. Kraay which removes the basis of Brown's chronology for Aegina before about 500.[13] In order to present a revision of Brown's early chronology it is first necessary to consider the later phases of Brown's system and the new evidence which bears upon them.

As Brown remarked, the Union Jack, staggered triangles, and mill sail punches were contemporary throughout much, if not all, of the period of Class 2 and in many cases these categories seem to describe nothing more than the successive modifications of the same die. This situation is evident in a homogeneous group of coins such as the Dunbabin Hoard, and it is now possible to offer documentation of the concurrent use of these forms of the incuse.

The following six coins share a common obverse die, marked by a crack running almost horizontally across the shell and the field. With it were employed a decayed Union Jack and two staggered triangles punches which appear to have resulted from a worn Union Jack die.

Rev. 1 (Union Jack): Dunbabin Hoard, 14 (PLATE I).
Rev. 2 (staggered triangles): Dunbabin Hoard, 13 (PLATE I); Corinth (from Isthmia excavations), IC 5, 11.39 gr.
Rev. 3 (staggered triangles): *BMC* 26, 12.09 gr. (PLATE VI, 6); BM, 12.34 gr., *NC* 1950, pl. XI, 2c; ANS, 12.14 gr.

The following four coins share a common obverse. The reverses used with it are staggered triangles and a mill sail evolving out of a worn Union Jack.

Rev. 1 (staggered triangles): ANS, 11.94 gr. (PLATE VI, 7).
Rev. 2 (staggered triangles): Dunbabin Hoard, 6 (PLATE I).
Rev. 3 (mill sail): Dunbabin Hoard, 5 (PLATE I); Athens, 11.95 gr.

[13] "The Archaic Owls of Athens: Classification and Chronology," *NC* 1956, pp. 43–68, esp. pp. 65–67.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The following five coins illustrate the contemporary use of the staggered triangles, mill sail, and early skew reverses. They share a common obverse die.

Rev. 1 (staggered triangles): ANS, *SNGBerry*, 753 12.46 gr. (PLATE VI, 8).

Rev. 2 (staggered triangles): ex E. Work, 12.37 gr.

Rev. 3 (mill sail): The Hague, 12.00 gr. (PLATE VI, 9).

Rev. 4 (early skew): Ashmolean, 11.43 gr. (PLATE VI, 10); Corinth (from Isthmia excavations), IC 63, 11.26 gr.

The staggered triangles reverses of the above group have segments which have become trapezoidal. The following two coins, however, illustrate the use of a true staggered triangles reverse and an early skew with the same obverse die.

Rev. 1 (staggered triangles): Athens (Myron-Karditsa Hoard), 11.93 gr., *Deltion* 1916, no. 1092 (PLATE VI, 11).

Rev. 2 (early skew): The Hague, 11.84 gr. (PLATE VI, 12).

These die-linked groups clearly show the difficulty of making a neat division of the Aeginetan coinage based solely on the incuse reverse. Both obverse and reverse must be considered. The Dunbabin Hoard shows a moment in the history of the coinage when the obverse style was a turtle with a thin collar at the anterior end of the shell and the early skew reverse was not yet known. We may now turn our attention to the phases of Brown's Class 2 which follow the period of the Dunbabin Hoard, as well as to Classes 3 and 4. In each case we shall be seeking to clarify the development of the obverse type in relation to the sequence of reverse punches.

The publication of a hoard of 38 archaic Greek silver coins from Anatolia was an event of great importance for the study of the Aeginetan series.[14] The upper chronological limit for the burial of the hoard is fixed by the presence of a tetradrachm of the Samian exiles who established themselves at Zankle in Sicily in 494/3 B.C. It bears the letter E (= 5) on its reverse, and in Robinson's convincing reconstruction of the historical setting of this series, the

[14] E. S. G. Robinson, "A Hoard of Archaic Greek Coins from Anatolia," *NC* 1961, pp. 107–117.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

fifth year of issue falls in 489/8.[15] Accepting Kraay's dating for the Athenian tetradrachms in the hoard (low 480's), Robinson places the burial at ca. 480.[16]

The Aeginetan staters of the Anatolian Hoard comprise one coin of Robinson's "pseudaeginetica" class (his no. 33),[17] four staters similar to the varieties represented in the Dunbabin Hoard (his nos. 23, 24, 26, 30), and six staters of quite different appearance (his nos. 25, 27, 28, 29, 31, 32). The obverses of this last group have large fat turtles with thick flippers. They fill the entire area of the flan and often run off the flan for lack of space. They are easily distinguished from the turtles of the Dunbabin Hoard by a further characteristic: a thickened collar at the anterior end of the shell. This new style of obverse, the Heavy Collar Turtle, belongs to the early fifth century. An example of the type is illustrated on PLATE VI, 13.[18] It is noteworthy that among the eleven Aeginetan coins in the Anatolian Hoard not one has the early skew reverse.

Still another style of obverse is known in Class 2 and is frequently found with the early skew. This is the turtle with a trefoil collar ⅄,

[15] "Rhegion, Zankle-Messana and the Samians," *JHS* 1946, pp. 13–20.

[16] W. P. Wallace, "The Early Coinages of Athens and Euboia," *NC* 1962, pp. 23–42, has sought to place these issues somewhat earlier; cf. Kraay's reply, *NC* 1962, pp. 417–423.

[17] The coins are Aeginetan, see Appendix below, p. 17.

[18] Fitzwilliam, Grose, *McClean Cat.* 6022, 11.35 gr. Although not mentioned by Grose, a note accompanying the coin indicates that it was part of the Taranto Hoard of 1911 (Noe, *Bibliography*[2], no. 1052). The note is convincing evidence because similar notes accompany Grose nos. 6009, 6010, and 6019, none of which are listed as Taranto Hoard coins in the *McClean Cat.* but two of which, nos. 6009 and 6010, were illustrated in Babelon's original publication of the hoard, *RN* 1912, pl. I, 2, and 4. Noe would date the latest south Italian incuse pieces in the hoard about 490 (note to *Bibliography*[2], no. 1052). The appearance of a heavy collar turtle in a hoard of that date would nicely support the evidence of the Anatolian Hoard. There is, however, some question concerning the composition of the Taranto Hoard. Paolo Orsi believed it was not one, but at least two different hoards placed on the market together (*Atti dell'IstItalNum*, III [1917], p. 29). It would be remarkable, however, if two such archaic hoards had been found in the same city at the same time. The six hundred coins and odd pieces of silver bullion which reached the market are a considerable and valuable quantity of metal. Perhaps the Taranto Hoard was deposited in two or more containers which came to light in 1911 during the course of the same building or agricultural work, at some days' interval apart. For knowledge of the notes accompaying the coins in Cambridge, I am grateful to Mr. Graham Pollard in a letter dated October 16, 1959.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

at the anterior end of the shell. It is a forerunner of the large handsomely struck creatures of the T-back class, just as the early skew is a forerunner of the T-back turtle's large skew. Two examples of the early trefoil collar turtle are illustrated on PLATE VI, 3 and 14[19] (cf. the T-back turtle, PLATE VI, 4). The beginning of the T-back turtle is now known to be before the mid 470's when one of them was sealed with a quantity of other coins and chronologically indicative fragments of Attic red-figured pottery in the debris of the fire which destroyed the archaic temple of Isthmian Poseidon.[20]

The trefoil collar dies used with early skew reverses are often small and obviously executed with a minimum of effort on the part of the die sinker. Compare PLATE VI, 3 with the older trefoil collar turtle, PLATE VI, 14. The new shoddy dies reflect pressure on the mint to produce coins at a vastly increased pace, and there is every reason to see in them the effects of the crises of the 480's, the Persian threat and the Athenian-Aeginetan war. Kraay has noted a similar phenomenon in the Athenian mint at this time.[21] The handsome T-back turtles, on the other hand, show the result of higher standards of die cutting imposed at the beginning of the 470's. The T-back turtle was replaced by the so-called tortoise type some time in or before the third quarter of the fifth century (see Appendix below).

The foregoing comments on Brown's system may be summarized as follows:

Classes 2 and 3 (end before early 470's)	Earlier Period *Obv.*: Thin collar turtle as in the Dunbabin Hoard. *Rev.*: Union Jack, staggered triangles, and mill sail. Lumpy surface over whole reverse in earlier phases.
	Later Period *Obv.*: Heavy collar turtle and trefoil collar turtle. *Rev.*: As before, smooth surface over whole reverse.

[19] No. 3 (see note 9); No. 14 – BM, 12.09 gr.
[20] I am grateful to Prof. Oscar Broneer for permission to anticipate the final publication of the Isthmia Deposit with these remarks.
[21] *NC* 1956, pp. 53 and 58.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Class 4 (early 480's (?) to early 470's)	*Obv.*: Heavy collar turtle and trefoil collar turtle. *Rev.*: Early skew.
Class 5 (early 470's to mid-fifth century)	*Obv.*: Large T-back turtle. *Rev.*: Large skew.

THE BEGINNING OF THE AEGINETAN COINAGE

The Cyclades Hoard, composed of early Greek silver coins, is of great assistance for the clearer definition of the first phases of the Aeginetan coinage.[22] Its find place is unknown, but the composition suggests the general area of the Aegean islands. Greenwell, who published the hoard, was not able to examine all the coins, among which were said to have been some silver fractions, as well as the didrachms he recorded. None of the published pieces gives any precise indication for dating the hoard, but it must belong to the sixth century.

The published contents of the hoard may be summarized as follows:[23] Aegina 114; Cos (?) 4; Paros (?) 2; Siphnos (?) 4; Thera, *obv.*: 2 dolphins in opposite directions, as in the Dunbabin Hoard 2; Uncertain, *obv.*: 2 dolphins r. 9, *obv.*: amphora 4, *obv.*: lion's head l. 2, *obv.*: sphinx (not Chios, A. B. Brett *AJN* [1914], p. 54, no. 4) 3.

Two Aeginetan staters showing distinctive treatment of the obverse type were illustrated by Greenwell. Through the Warren Collection they came to the Museum of Fine Arts in Boston together with a third Aeginetan piece from the hoard, which also seems to have been selected for the Warren Collection because of the unusual style of its obverse. Appearance is not the only unusual characteristic of these coins; each is part of a small group of closely die-linked staters.

Together with the obverse of Brown's Class 1, the Cyclades Hoard staters exhibit the beginnings of almost every variation of design known for the Aeginetan obverse type. The obverse of Brown's Class 1 is the forerunner of the thin collar turtles of the Dunbabin

[22] Published by W. Greenwell, "On a Find of Archaic Greek Coins, Principally of the Islands of the Aegean Sea," *NC* 1890, pp. 13–19.
[23] Cf. Noe, *Bibliography*[2], no. 289.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Hoard, and for convenience, we may describe the three distinctive obverse types known from the Cyclades Hoard as the "proto heavy collar turtle," "the proto trefoil collar turtle," and the "proto tortoise." The corpus of the three groups follows:

PROTO HEAVY COLLAR TURTLE

Group A

Obv.: Small compact turtle with heavy flippers and heavy collar at the anterior end of the shell.

Rev.: Small deep Union Jack.

Obv. 1—*Rev.* 1 (a) Boston, MFA (from the Cyclades Hoard), 12.33 gr., Brett Cat. 1107 (PLATE VII, 1).

(b) Brussels, Desneux Coll., 12.13 gr. = Soc. royale de Num. Belg., *Exposition numismatique* (Brussels, 1966), 185.

(c) Naville 16 (July 3, 1933 – St. Marceaux Coll.), 1227, 12.16 gr.

Obv. 1—*Rev.* 2 (d) Bucharest, National Museum, 10.49 gr.

(e) Hermitage, 12.28 gr.

(f) ANS, 12.07 gr.

(g) ANS, 12.27 gr.

(h) ex Bompois Coll., 10.80 gr. (cast at Winterthur, PLATE VII, 2).

(i) Naville 1 (Apr. 4, 1921 – Pozzi Coll.), 1615, 12.20 gr.

Obv. 1—*Rev.* 3 (j) Baltimore, Johns Hopkins University, 12.38 gr. (PLATE VII, 3).

Obv. 1—*Rev.* 4 (k) *SNGLockett* 1946, 12.20 gr.

Obv. 1—*Rev.* 5 (l) ANS, *SNGBerry* 748, 12.20 gr.

Obv. 1—*Rev.* 6 (m) Stockholm, 12.38 gr. (PLATE VII, 4).

Obv. 2—*Rev.* 7 (n) A. S. Dewing Coll. (Cambridge, Mass.) 12.44 gr.

(o) Hermitage, 12.16 gr. (PLATE VII, 5).

(p) Robinson, *Cat. of Ancient Greek Coins*, 217 (ex Locker-Lampson Coll.) = Naville 12 (Oct. 18, 1926 – Bissen Coll.), 1455, 12.34 gr.

(q) J. Ward, *Greek Coins and their Parent Cities*, 511 (ex Ward Coll.), 12.15 gr.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Proto Trefoil Collar Turtle

Group B

Obv.: Large turtle with heavy flippers, heart shaped shell, and trefoil collar at the anterior end of the shell.

Rev.: As Group A.

Obv. 1—*Rev.* 1 (a) Boston, MFA (from the Cyclades Hoard, *NC* 1890, pl. II, 9), 12.36 gr., Brett Cat. 1108 (Plate VII, 6).

(b) Hermitage, 12.47 gr.

(c) Stockholm, F. Forbart Coll., 12.30 gr. (Plate VII, 7).

Obv. 2—*Rev.* 1 (d) ANS = J. Schulman, May 31, 1927 (Leonardos Coll.), 227, 11.98 gr.

Obv. 3—*Rev.* 2 (e) Budapest, 11.83 gr.

(f) Hermitage, 12.38 gr. (Plate VII, 8).

(g) *BMC* 9, 12.44 gr.

Obv. 4—*Rev.* 2 (h) Robinson Coll. (Dorset), 12.28 gr.

(i) Hermitage, 12.32 gr. (Plate VII, 9).

(j) *BN*, 12.20 gr., Babelon, *Traité*, II, 1, no. 1009, pl. XXIX, 6.

Proto Tortoise

Group C

Obv.: Individual scales of the shell indicated in detail, the so-called "tortoise" variety of the type (see Appendix).

Rev.: As in Groups A and B.

Obv. 1—*Rev.* 1 (a) Boston, MFA, (from the Cyclades Hoard), 12.18 gr., Brett Cat. 1280 = *NC* 1928, p. 173, no. 3e = *NC* 1890, pl. II, 10 (Plate VII, 10).

Obv. 2—*Rev.* 2 (b) *SNGLockett* 2634 (*NC* 1928, p. 173, no. 2c), 12.23 gr. = Naville 1 (Apr. 4, 1921 – Pozzi Coll.), 1631.

Obv. 3—*Rev.* 3 (c) BM, 11.90 gr., *NC* 1928, p. 173, no. 1 (Plate VII, 11).

Obv. 4—*Rev.* 3 (d) Hermitage, 12.42 gr. (Plate VIII, 1).

(e) ANS (ex Martin Coll.), 11.79 gr. = *NC* 1928, p. 173, no. 2b.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv. 5—*Rev.* 4 (f) ANS, 12.05 gr., S. R. Milbank, *Coinage of Aegina*, pl. I, 12.

Obv. 5—*Rev.* ? (g) *NC* 1928, p. 173, no. 2a, 11.79 gr. = Sotheby, Feb. 3–11, 1909 (Benson Coll.), 538 (rev. not illus.).

Obv. 6—*Rev.* 5 (h) Fitzwilliam, *SNG* 3305, 11.72 gr. (PLATE VIII, 2).

Obv. 7—*Rev.* 5 (i) Hermitage, 12.52 gr. (rev. badly worn, PLATE VIII, 3).

Obv. 8—*Rev.* 6 (j) Copenhagen, *SNG* 400, 11.06 gr.

Obv. 9—*Rev.* 7 (k) Berlin, 12.37 gr. (Robinson, *NC* 1928, p. 173, nos. 3c, 3d, lists two coins from the same dies in the Berlin Coll. of which this is one.)

(l) BM, 11.66 gr., *NC* 1928, p. 173, no. 3a = *NC* 1900, p. 285, no. 15, pl. XIII, 16.

(m) BN, 12.34 gr., Babelon, *Traité*, II, 3, no. 110 = *NC* 1928, p. 173, no. 3f. (PLATE VIII, 4).

Obv. 9—*Rev.* 8 (n) *SNGSpenser-Churchill* 157 (ex Desneux Coll.), 12.33 gr. = *NC* 1928, p. 173, no. 3b.

Obv. 9—*Rev.* 9 (o) Vienna, 11.97 gr. (PLATE VIII, 5).

Obv. 9—*Rev.* 10 (p) Brussels, Desneux Coll., 12.26 gr. = Soc. royale de Num. Belg., *Exposition numismatique*, no. 191 (PLATE VIII, 6).

(q) *SNGLockett* 2635, 12.17 gr. = *NC* 1928, p. 173, no. 3g.

These three groups of coins stand apart from the obverse styles examined above which are characteristic of the Aeginetan coinage in the later sixth and early fifth centuries. There is no trace of them in the Dunbabin Hoard or in any other archaic hoard. Their reverses are small, deep Union Jacks and they uniformly exhibit another evidence of early date, the original unflattened surface of the flan around the reverse incuse. This places them earlier than the Dunbabin Hoard; in fact their place is at the beginning of the Aeginetan series, immediately after the pair of dies which constitutes Brown's Class 1. Brown's Class 1 and these three groups together may be termed the "Early Linked Series."

To appreciate the singularity of the Early Linked Series one only need recall the character of the Aeginetan coinage of the period

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

reflected in the Dunbabin Hoard: a great variety of dies and a lack of die repetition. This aspect of the Dunbabin Hoard is typical of the entire archaic Aeginetan coinage. Save for the Early Linked Series, the 1067 archaic Aeginetan staters collected for my doctoral dissertation showed the same absence of die repetitions. It is reasonable, therefore, to identify the staters of the Dunbabin Hoard as representative of a large and active mint. At the same time, the great frequency of die linkages in the Early Linked Series indicates that they were struck by a small establishment. The repetition of most of the earliest obverses, many in more than two examples, indicates that we possess a good sampling of the work of a very small mint and that the losses in the earliest die sequence are insignificant. The self-contained and discontinuous character of the separate groups of the Early Linked Series is also important. The mint was not only small; its activity was probably intermittent as well, and this circumstance is reflected in the several distinct styles of obverses with which it experimented.

It is necessary to view the beginning of the Aeginetan series in the light of the companion studies of Jacobsthal and Robinson in the archaeology of the basis deposit of the Ephesian Artemision.[24] Since the deposit contained pre-coin striated dumps and closely linked examples of the earliest types of electrum coins, the conclusion is inescapable that the first issue of coins occurred not long before its formation. Jacobsthal's analysis of the precious objects from the deposit suggested that they were assembled in the first decade of the sixth century, and Robinson concluded that the invention of struck coinage took place in the last thirty years of the seventh century.

[24] Paul Jacobsthal, "The Date of the Ephesian Foundation-Deposit," *JHS* 1951, pp. 85–95 and E. S. G. Robinson, "The Coins from the Ephesian Artemision Reconsidered," *JHS* 1951, pp. 156–167. Subsequently, the literary tradition attributing the invention of coinage to the seventh century Argive ruler Pheidon (Heracleides of Pontus quoted in *Etymologicum Magnum*. 613 and Ephorus quoted by Strabo, 8.16 = *FGrHist* 70.176) has been supported by D. Kagan, "Pheidon's Aeginetan Coinage," *TAPA* 91 (1960), pp. 121–136. No seventh century date, however, will fit the numismatic evidence for the opening of the Aeginetan mint and the genesis of the fourth century speculations as to the origins of the rude archaic Aeginetan coins still circulating at the time has been plausibly suggested by T. Lenschau in *RE* 19.2 (1938), col. 1944.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

If we compare the Early Linked Series of Aeginetan staters with the material from the Ephesus basis deposit and related strata which were laid down in the first years of the sixth century, we may well question whether the first Aeginetan stater was made in the seventh century. The products of the first pair of Aeginetan dies (PLATE VI, 2) and the entire Early Linked Series show a high degree of technical skill and experience. The striking is careful, the flan is well centered, and the obverse die has been cut in high relief. In fact, the first Aeginetan stater presupposes the process of development from the striated dump to the first true coin, which we can follow step by step in the Ephesus material. The Ephesian basis deposit and associated strata bring us down to the first decade of the sixth century. It would be difficult to believe that the first Aeginetan coin was struck before that date.

Although the beginning of the coinage is to be placed in the first quarter of the sixth century, it must be realized that the first years of the mint were a period of intermittent activity and technical experimentation. It is naturally difficult to estimate the time occupied by the Early Linked Series, but the Dunbabin Hoard allows us to make some suggestions. This hoard belongs to the second half of the century, but since it contains only thin collar turtles, it is unlikely that it comes very near the end. The evidence of the vase which held it also points more to the third than to the last quarter of the century. Its coins generally show traces of wear. They were not mint fresh when hoarded but had passed from hand to hand on their way to Crete and no doubt on the island itself. The remarkable expansion of minting activity they reflect takes us back to a moment around the middle of the sixth century, more probably before 550 than after.[25] This is an indefinite date, but it is no more indefinite than the dates we have for historical figures such as Agariste and Periander, and it is evidence of commercial and financial activity worthy of close attention by the economic historian.

The economic history of Aegina is intimately connected with the importing of grain from Egypt and the Black Sea region. When

[25] The result is much the same even if Brown's statement about the container of the hoard were to be correct. But if the container was an Attic vase of ca. 525, we could not press our evidence for the expansion of the coinage back beyond the third quarter of the sixth century.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Naucratis was turned over to the Greeks as a treaty port by the Pharaoh Amasis (568–526), Aegina was the only non-Ionian state to have a share in its organization. So important were the Aeginetans that, like the Samians and the Milesians, they had a private shrine.[26] At this time Greek commerce with Egypt was not a century old, for despite the presence of Greek mercenaries in Egypt in the mid-seventh century, the archaeological evidence indicates that quantities of Greek wares and settled Greek trade did not come to Naucratis before the end of the seventh century.[27] At the same time the Black Sea was becoming known and settled by Greek colonies.[28] Again the Aeginetans were involved. The grain ships Xerxes saw coming south through the Hellespont in 480 were bound for Aegina.[29] The wheat of Egypt and Thrace destined for the Peloponnesus apparently reached its destination through the wholesale market on the island.

The Aeginetan coinage is the tangible result of these economic factors, and it is gratifying to note how closely the history of the coinage accords with the development of the island's commerce. In the early sixth century Aegina was an international market, perhaps already the grain market for the Peloponnesus, and her stater coinage came into being as a necessary instrument to facilitate the exchange of this and other bulk merchandise.[30] Then around the middle of the

[26] Hdt.2.178.

[27] J. D. Beazley and H. Payne, "Attic Black-Figured Fragments from Naucratis," *JHS* 1929, pp. 253–272 and R. M. Cook in *CVA*, Great Britain fasc. 13, BM fasc. 8 (1954), Appendix A, B. Eusebius' date for the foundation of Naucratis, Olympiad 7 = 748 (ed. Helm, p. 88b) is certainly too early. But the city was there before it became exclusively Greek. The local historian Polycharmus knew its history at least as early as Olympiad 23 = 688 (*FGrHist* 640 = Athenaeus 15.18, p. 675f–676c) and Strabo 17.18 preserves an account of an early Milesian expedition to the site in the time of Psammetichus I.

[28] A. R. Burn, "Dates in Early Greek History," *JHS* 1935, pp. 133–136 and C. Roebuck, *Ionian Trade and Colonization* (New York, 1959), pp. 116–124.

[29] Hdt. 7.147.

[30] See H. Knorringa, *Emporos*. The mechanics of the Aeginetan grain trade (underestimating somewhat the importance of the Pontic area) have been studied by J. G. Milne, "Trade between Greece and Egypt before Alexander the Great," *JEgyptArch* 1939, pp. 177–183 and C. H. V. Sutherland, "Corn and Coin: A Note on Greek Commercial Monopolies," *AJPhilology* 1943, pp. 129–147.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

sixth century Aegina obtained a concession at Naucratis. It cannot be a coincidence that simultaneously her mint passes from its experimental phase to the steady output of a large and homogeneous coinage. Naucratis made Aegina, and although her situation in the Saronic gulf had given the island a role in commerce since the Neolithic Age, the rise of the great emporium of Aegina is a matter of the mid-sixth century. The Dunbabin Hoard is the perfect numismatic documentation of this event for it shows the trail of Aeginetan silver on the trade route south to Egypt soon after the middle of the sixth century.

The foregoing revision of Brown's classes and chronology may be summarized as follows.

Class 1 (ca. 580)	*Obv.*: Turtle. *Rev.*: Incuse reminiscent of Ionian electrum.
Class 2 and 3 (begins ca. 575, ends before early 470's)	Period 1: ca. 575–ca. 550. *Obv.*: Proto heavy collar turtle, proto trefoil collar turtle, proto tortoise. *Rev.*: Union Jack; lumpy surface around punch mark. Period 2: ca. 550–ca. 500. *Obv.*: Thin collar turtle as in the Dunbabin Hoard. *Rev.*: Union Jack, five triangles, and mill sail; lumpy surface over whole reverse in earlier phases. Period 3: ca. 500–before early 470's. *Obv.*: Heavy collar turtle and trefoil collar turtle. *Rev.*: As before, smooth surface over whole reverse.
Class 4 (early 480's to early 470's)	*Obv.*: Heavy collar turtle and trefoil collar turtle. *Rev.*: Early skew.
Class 5 (early 470's to mid-fifth century)	*Obv.*: Large T-back turtle. *Rev.*: Large skew.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

APPENDIX

The Attribution of the Proto-Tortoise Group

In 1928 E. S. G. Robinson suggested that the proto-tortoise staters were struck by the mint which later in the fifth century produced the tortoise hemidrachms distinguished by a crescent in one segment of the skew reverse.[31] The known provenances of the crescent hemidrachms are overwhelmingly Cretan, and Robinson made a good case for attributing them to Cydonia, Aegina's colony in Crete.[32]

In order to discuss Robinson's attribution of the proto-tortoises it is necessary to take note of the remaining coins of this type, which are less closely allied to the specimen from the Cyclades Hoard than the pieces listed above, p. 11.

Obv.: Turtle of the so-called "tortoise" type with individual scales of the shell indicated in detail as Group C.

Rev.: Staggered triangles incuse, except for no. 8 (mill sail) and nos. 10 and 11 (incuse composed of 4 trapezoidal segments).

Obv. 1—*Rev.* 1 (a) Corinth (from Isthmia excavations), IC 23, 12.05 gr. (Plate VIII, 7).

Obv. 1—*Rev.* 2 (b) BM, *NC* 1928, p. 174, no. 4 = *Corolla Num.* p. 36, pl. I, IIb (Plate VIII, 8).

Obv. 2—*Rev.* 3 (c) Ashmolean (from the Anatolian Hoard), 11.61 gr., *NC* 1961, p. 112, no. 33, pl. XV.

Obv. 3—*Rev.* 4 (d) Athens (from the Myron-Karditsa Hoard), 11.45 gr., *Deltion* 1916, no. 1123.

Obv. 3—*Rev.* 5 (e) Athens (from the Myron-Karditsa Hoard), 11.02 gr., *Deltion* 1916, no. 1231.

Obv. 3—*Rev.* 6 (f) Athens, 11.75 gr.

Obv. 3—*Rev.* 7 (g) Brussels, Desneux Coll., 12.21 gr. = Soc. royale de Num. Belg., *Exposition numismatique* (Brussels, 1966), no. 189, pl. II.

Obv. 4—*Rev.* 8 (h) Athens (from the Myron-Karditsa Hoard), 11.55 gr., *Deltion* 1916, no. 1147.

Obv. 4—*Rev.* 9 (i) *BMC* 16, 11.70 gr. = *NC* 1928, p. 174, no. 5, pl. IX.

[31] "Pseudaeginetica," *NC* 1928, pp. 172–198.

[32] Strabo 8.16.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv. 5—*Rev.* 10 (k) Robinson Coll. (Dorset), 11.92 gr.
Obv. 6—*Rev.* 11 (l) ANS, *SNGBerry* 754, 11.40 gr.
Obv. 7—*Rev.* 12 (m) Istanbul, 11.72 gr.

Robinson's first reason for associating the crescent hemidrachms and the proto-tortoise staters is directly concerned with the coins listed above. He interpreted a curved ridge in the right obverse field of one of the British Museum coins (b) as a crescent symbol. There is, from the Isthmia Excavations, another specimen of the same obverse (a) and inspection of this piece with casts of the British Museum specimen indicates that the crescent is the result of a die fault.[33]

Robinson also believed that the variations in style of the obverse dies and the different forms of the incuse employed, Union Jack, staggered triangles, and mill sail, showed that the series as a whole was struck over a long period of time. He continued,[34]

> If the coins belong to a single issue, representing an unsuccessful attempt to vary the conventional type, they might be fitted into the Aeginetan series. But it is more difficult to believe that in an "international" currency like the Aeginetan, where uniformity is of the first importance, a variant representation was permitted to recur sporadically at the considerable intervals demanded by the development of style and fabric.

The problem here raised is not so much the subjective judgment of the style of the obverses as the relative age of the various forms of the Aeginetan incuse punch. The evidence of the indiscriminate use of reverses of the Union Jack, staggered triangles, and mill sail types, evident in the Dunbabin Hoard and further illustrated by the die-linked groups presented on pp. 5–6, removes the necessity of believing that any of the reverses of the coins just listed must be significantly later than those of the other proto-tortoises which are grouped with the specimen from the Cyclades Hoard. I do not argue that the proto-tortoises were struck all at one time. The pieces hoarded in the early

[33] The crescent reported on the obverse of the proto-tortoise in Copenhagen, *SNG* 400, above, Group C (i), is apparently an interpretation of the surface inspired by Robinson's theory.
[34] *NC* 1928, pp. 185–186.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

fifth century (Anatolian Hoard, (c) above, and to judge from the description, the unillustrated piece from the Zagazig Hoard, *ZfN* 1927, p. 123, no. 231) and the example from the destruction deposit of the archaic temple of Isthmian Poseidon ((a) above) are younger than the specimen which found its way into the Cyclades Hoard (Group C (a)), and they may well belong to the early years of the expansion of the Aeginetan mint documented by the Dunbabin Hoard. But it is incorrect to think that the group was struck over such a long period of time that if Aeginetan it must have been a periodically recurring aberration in the coinage. The work of the early decades of the mint was experimental and inventive. The proto-trefoil collar staters (Group B) are almost as far from the design of the usual Aeginetan turtle as are the proto-tortoises.

There are other factors bearing on the attribution of the proto-tortoises to the Aeginetan series. The first of these is the known provenance of the proto-tortoise staters. There are four: in addition to the piece from the Cyclades Hoard, one specimen was found in Asia Minor; another in the sanctuary of Poseidon on the Isthmus of Corinth; the fourth in Egypt. As Robinson acknowledges in his publication of the piece from the Anatolian Hoard, the provenances hardly favor the original Cretan attribution. The Dunbabin Hoard, moreover, from Matala in Crete, has not one proto-tortoise among its 70 preserved Aeginetan coins. Although not conclusive, the pattern of provenance would be suitable for an Aeginetan issue.

There is a further consideration which weighs in favor of Aegina. Aegina and Athens have long been considered the typical examples of conservatism in coin design. However, it may be doubted whether the full degree of conservatism at Aegina has been completely appreciated. After the initial experimental phase of the coinage represented by the Early Linked Series, there was almost no innovation in the obverse type, only the development of existing styles.

The heavy collar at the anterior end of the turtle's shell, which distinguishes the obverses made during the later part of the period of Brown's Class 2, is nothing more than the revival of a style present at the beginning of the coinage. The trefoil collar, which is also found in Class 2, appears with the early skews of Class 4, and became the standard design for the obverse after the Persian Wars, is also

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the continuation of one of the earliest designs of the mint. As Brown pointed out, the T-back design was also present in an early stage of the coinage as illustrated by a coin in the Hermitage (12.47 gr., PLATE VIII, 9) which has a small deep Union Jack incuse leaving the area surrounding the incuse depression in the uneven state of the original flan.

But what of the great stylistic break in the Aeginetan coinage, the introduction of the true tortoise type in the fifth century? The discovery of a coin of Azbaal of Citium in Cyprus overstruck on a tortoise,[35] which was therefore in existence before the end of that ruler's reign about 425, disproves Earle-Fox's theory that the type began with the return of the exiled Aeginetans at the end of the Peloponnesian War in 404.[36] The first true tortoises are certainly coins of Aegina struck before the suppression of the island's autonomy by Athens in 431. The earliest of them have a reverse indistinguishable from that of the preceding T-back series. There is no reason to think that the substitution of the new type implies an interval of inactivity in the history of the mint. The destruction deposit of the Isthmian Temple shows that proto-tortoises were to be seen in the 470's, and in view of the conservatism of Aeginetan coin design, the later tortoises appear to be simply another revival of a preexisting type.

Nevertheless, there is a logical simplicity in the assumption that a radical change in type design means a break in the coinage, and this theory has been revived by E. S. G. Robinson in the following form.[37] In 457, Aegina made subject to Athens; the mint is closed. In 446/5, the thirty years peace between Athens and Sparta; the autonomy of Aegina is guaranteed; the mint is reopened, and the tortoise series begins. In 431, deportation of the Aeginetans, installation of the Athenian cleruchy; the mint is closed. In 404, the return of the Aeginetan exiles; resumption of the coinage and continued use of the tortoise type. Another proposal recently made by R. Rago

[35] S. P. Noe, "Countermarked and Overstruck Greek Coins at the American Numismatic Society," *ANSMN* 6 (1954), p. 90, pl. XIV, 2.
[36] H. B. Earle-Fox, "The Early Coinages of European Greece," *Corolla Numismatica* (London, 1906), p. 35.
[37] *NC* 1961, p. 112.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

holds that the tortoise type was forced on the Aeginetans by Athens in 457 as a condition of surrender.[38] I think this less likely than Robinson's reconstruction of events, but both, I fear, are open to the criticism that they are prone to see any type change as the record of an historical event.

[38] "Il Cambio di Tartaruga ad Egina," *RIN* 1963, pp. 7–15.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

A HOARD OF BRONZE COINS FROM ERYTHRAE

PHILIP P. BETANCOURT

A number of unresolved problems have plagued the bronze coinage of Erythrae. The catalogues of the larger collections[1] have been content to assign the city's currency to arbitrary time periods based on "traditional" systems that were developed in the last century, and although epigraphic considerations[2] indicated some time ago that these early systems have little basis in historical fact, there has been an insufficient amount of numismatic evidence to establish the chronology for the city's minor issues. The present study is able partially to correct this situation by presenting the information suggested by an unpublished hoard of Erythraean bronzes. While the evidence from the hoard does not bear on all of the problems that confront the coinage of this Ionian city, when the group of coins is considered in conjunction with the epigraphic evidence it can suggest an outline for at least a portion of the Erythraean minor currency.

The hoard, now in a private collection, was apparently found a great many years ago. Purchased about 1950 by a dealer in the United States as a part of an old collection, the coins seem to have been generally ignored for several years, except for the removal of a few individual pieces now scattered and lost. At the present time, the group consists of forty-two specimens, all from Erythrae. Several of the coins have been excessively cleaned, but all of those which

[1] *BMC Ionia*, pp. 122ff.; L. Forrer, *The Weber Collection* III (London, 1926), nos. 5923–5972; S. W. Grose, *Catalogue of the McClean Collection of Greek Coins, Fitzwilliam Museum* (Cambridge, 1929), nos. 8155–8170; J. G. Milne, "Notes on the Oxford Collections," *NC* 1937, pp. 153–181; *SNGCopenhagen* (1946), nos. 569–739; *SNGDeutschland, Sammlung v. Aulock* (1957), nos. 1950–1968. For additional numismatic references for Erythrae see D. Kienast, "Literaturüberblicke der griechischen Numismatik," *JNG* 1962, p. 159.

[2] There were hints as early as the last century that the epigraphic material would lead to a realignment of the chronology (see H. Gaebler, *Erythrä* [Berlin, 1892], pp. 85ff.), but the basic studies in this area are by L. Robert, "Inscriptions d'Érythrai," *BCH* 57 (1933), pp. 477–481; "Notes de Numismatique et d'Épigraphie Grecques," *RN* 1936, pp. 271–272; "Monnaie d'Ionie," *Hellenica* 7 (1949), pp. 87–88.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

have not exhibit the same green patination, and the fact that they were in the same lot suggests that they came from the same find. The hoard's original size is unknown, but it is obvious that a number of specimens were removed during the course of its history. Many of those that remain are worn or corroded, and a majority are of the smaller sizes.

The coins are here arranged in accordance with their degree of wear, a technique which may not yield solid results with individual issues but is fairly adequate with the placing of types that include a number of specimens. For the Large Bronzes, the chronological priority of Type I over Type III is certain, and for the Small Bronzes the sequence must run Types I/II, Type VII, Type VIII, Type IX, with the possible exception of the order of Types VIII and IX. For the Middle Bronzes, Types V and VI are contemporary; the amount of wear could place Type IV either earlier or later. The coins have not been illustrated since the types are common and most of the coins are excessively worn or corroded.

Obv.: Head of youthful Heracles r., in lion's skin.
Rev.: EPY Magistrate's name; bow in case and club.

TYPE I

Large Bronze

1. → 13.47 gr. *Rev.* Name illegible.

Small Bronze

2. → 1.44 gr. *Rev.* [AΓO] ΛΛOΔO [TOΣ] Cf. *NC* 1937, p. 166, no. 8.
3. ↗ 1.82 gr. (cleaned). *Rev.* Name illegible.
4. ↗ 1.46 gr. (cleaned). *Rev.* Name illegible.
5. ← 2.21 gr. (cleaned). *Rev.* ΘPAΣYΣ Cf. *BMC* 75; Copenhagen, *SNG* 598.
6. → 2.28 gr. (cleaned). *Rev.* EPY off flan. KAΛΛIΣ Cf. *BMC* 86–88; Copenhagen, *SNG* 629; *McClean* 8157; *Weber* 5936.
7. ← 1.59 gr. (cleaned). *Rev.* [A]PIΣTOKΛH[Σ] Cf. *BMC* 66; Copenhagen *SNG* 593.

Obv.: Bow in case.
Rev.: EPY Magistrate's name; club.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

TYPE II

Small Bronze

8. ↑ 2.00 gr. (cleaned). *Rev.* ΗΡΑΚΛΕΩΤΗΣ

Obv.: Head of youthful Heracles r., in lion's skin.
Rev.: ΕΡΥ Magistrate's name with patronymic; bow in case, club and bust of Heracles in lion's skin three-quarter facing to r.

TYPE III

Large Bronze

9. ↘ 7.18 gr. *Obv.* Cmk.: Head of Helios, facing and club. *Rev.* ΜΕΝΕ[Κ]Λ[ΗΣ] ΑΡ[ΙΣΤΟΔΗΜ]ΟΥ Cmk.: Head of Helios, facing and club (?). Cf. *BMC* 183; Copenhagen, *SNG* 703.

Obv.: Head of bearded Heracles r., in lion's skin; border of dots.
Rev.: ΕΡΥ Magistrate's name with patronymic; bow in case and club.

TYPE IV

Middle Bronze

10. → 2.53 gr. *Rev.* ΔΗΜΗΤΡΙΟΣ ΑΠΕΛΛΟΥ Cf. *BMC* 201–202.

Rev.: ΕΡΥ Magistrate's name with patronymic; bow in case, bee and club.

11. → 3.15 gr. *Rev.* ΗΡΑΚΛΕΟ[Σ] ΕΠΙΚΟΥΡΟ[Υ] Cf. *BMC* 212–213; Copenhagen, *SNG* 721–723.

Obv.: Head of youthful Herakles r., in lion's skin.
Rev.: ΕΡΥ Magistrate's name with patronymic.

TYPE V

Middle Bronze

12. ↓ 3.09 gr. *Rev.* ΑΠΟΛΛΩΝΙΟΣ ΑΠΟΛΛΟΔΟΤΟΥ Cf. *BMC* 106; Copenhagen, *SNG* 638; *Weber* 5953. (Obv. very worn and corroded; same rev. die as 14.)

13. ↘ 3.00 gr. *Rev.* as 12.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

14. ↘ 3.87 gr. *Rev.* as 12. (Obv. very worn and corroded; same rev. die as 12.)
15. ↑ 2.92 gr. *Rev.* ΑΥΤΟΝΟΜΟΣ ΑΥΤΟΝΟΜΟΥ Cf. *BMC* 108; Copenhagen, *SNG* 639–640; *Weber* 5957. (Obv. very worn.)
16. → 3.10 gr. *Rev.* as 15. (Obv. very worn.)
17. ↘ 3.76 gr. *Rev.* as 15. (Obv. very worn; same rev. die as 18.)
18. ↓ 2.61 gr. *Rev.* as 15. (Same rev. die as 17.)
19. ↑ 2.34 gr. *Rev.* ΓΝΩΤΟΣ ΕΚΑΤΩΝΥΜΟΥ Cf. *BMC* 110; Copenhagen, *SNG* 641; *Weber* 5954. (Obv. very corroded.)
20. ↑ 2.93 gr. *Rev.* ΦΙΛΩΝ ΗΡΟΣΩΝΤΟΣ Cf. *BMC* 116; Copenhagen, *SNG* 646; *Weber* 5952. (Obv. very worn and corroded.)
21. ↑ 2.71 gr. *Rev.* as 20. (Obv. very worn and corroded.)
22. ↑ 4.02 gr. *Rev.* as 20. (Obv. very worn and corroded.)
23. ↑ 3.18 gr. *Rev.* as 20. (Obv. very worn and corroded.)
24. ↑ 2.52 gr. *Rev.* as 20. (Obv. very worn and corroded.)

    Obv.: Head of youthful Heracles r., in lion's skin; border of dots.
25. ↑ 2.64 gr. *Rev.* ΠΟΛΥΚΡΙΤΟΣ ΠΟΛΥΚΡΙΤΟΥ Cf. *BMC* 115; Copenhagen, *SNG* 650. (Obv. very worn and corroded; same rev. die as 28.)
26. ↖ 3.73 gr. *Rev.* as 25. (Obv. very worn and corroded.)
27. ↑ 2.67 gr. *Rev.* as 25. (Obv. very worn and corroded.)
28. ↑ 3.39 gr. *Rev.* as 25. (Obv. very worn and corroded; same rev. die as 25.)
29. ↑ 3.41 gr. *Rev.* ΜΗΤΡΑΣ ΔΑΜΑΛΟΥ Cf. *BMC* 114; Copenhagen, *SNG* 649; *McClean* 8162–8163.

    Obv.: Head of youthful Heracles r., in lion's skin.
30. ↑ 2.46 gr. *Rev.* ΔΑΜΑΛΗΣ ΑΡΧΕΑΝΑΚΤΟΣ Cf. *BMC* 111; Copenhagen, *SNG* 642; *Weber* 5950; *SNGv.Aulock* 1960.

    Obv.: Head of youthful Heracles r., in lion's skin; border of dots.
31. ↑ 3.82 gr. (cleaned). *Rev.* ΑΓΑΣΙΚΛΗΣ ΑΝΤΙΠΑΤΡΟΥ Cf. *BMC* 103–105; Copenhagen, *SNG* 636–637; *SNGv.Aulock* 1956.
32. ↑ 3.27 gr. *Rev.* as 31.
33. ↘ 2.66 gr. *Rev.* ΒΑΤΑΚΟΣ ΠΑΡΑΜΟΝΟΥ Cf. *BMC* 109; Copenhagen, *SNG* 648; *SNGv.Aulock* 1957. (Obv. double struck.)

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv.: Head of young Dionysus r., wearing ivy wreath.
Rev.: EPY Magistrate's name with patronymic; bunch of grapes.

TYPE VI

Middle Bronze

34. ↖ 3.34 gr. *Rev.* ΜΗΤΡΑΣ ΔΑΜΑΛΟΥ Cf. Copenhagen, *SNG* 661; *Weber* 5956.

35. ↗ 2.65 gr. *Rev.* [Δ]ΙΟΝΥΣΙΟΣ [Ι]ΑΤΡΟΚΛΕΙΟΥΣ Cf. *BMC* 123; Copenhagen, *SNG* 656.

Obv.: Head of Athena in close fitting crested helmet; border of dots.
Rev.: EPY Magistrate's name with patronymic.

TYPE VII

Small Bronze

36. ↑ 1.83 gr. *Rev.* Name illegible. (Obv. and rev. very worn and corroded.)

37. ↑ 1.09 gr. (cleaned). *Rev.* ΔΙΟΝΥΣΙΟΣ ΠΡΩΤΟ[ΓΕΝΟΥ] Cf. *BMC* 129; *SNGv.Aulock* 1967.

Obv.: Head of Helios facing, radiate.
Rev.: EPY Magistrate's name.

TYPE VIII

Small Bronze

38. ↑ 0.81 gr. (cleaned). *Rev.* [ ]ΚΛΗΣ(?) (Obv. very worn and corroded.)

39. ↑ 1.01 gr. (cleaned). *Rev.* ΑΝΤΙΟΧΟΣ Cf. Copenhagen, *SNG* 667.

40. ↗ 0.90 gr. (cleaned). *Rev.* ΠΡΩΤΟΓΕΝΗ[Σ] Cf. Copenhagen, *SNG* 671; *NC* 1937, p. 168, no. 21.

Obv.: Club; border of dots.
Rev.: EPY Magistrate's name.

TYPE IX

Small Bronze

41. ↑ 0.91 gr. (cleaned). *Rev.* ΙΩΠΥΡΟΣ

42. ← 0.81 gr. (cleaned). *Rev.* ΘΡΑΣΥ[Δ]ΗΜΟΣ Cf. Copenhagen, *SNG* 677.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

COMMENTARY

Types I–II

From the amount of wear that the coins show, it is clear that Types I and II include the earliest pieces in the hoard, even though a few of the specimens (nos. 6 and 7) are relatively unworn.[3] Type I is characterized by an obverse with a youthful head of Heracles wearing the lion's pelt and a reverse that includes the legend EPY, a club, a bow in its case, and a magistrate's name. Type II, with the bow in case on the obverse, and the club and magistrate's name on the reverse, can be placed in the same group with Type I because of the worn condition of the single specimen of Type II that was found in the hoard (no. 8), and the relationship is apparently confirmed by the similarity of style as well as by the fact that the same magistrates' names appear on both issues.[4]

Three different denominations can be distinguished among the bronzes of Type I, although only the Large Bronze and the Small Bronze are found in the hoard that is discussed here. While the individual coins show only rough correspondence with regard to both size and weight, there was apparently some attempt to standardize the three denominations (see Table I). The Large Bronzes, with a weight that usually varies from a little over 9 grams to more than 13 grams, are about 2 to 2.5 centimeters in diameter. The Middle Bronzes have a mean weight of 3.4 grams and diameters that are almost always around 1.7 to 1.9 centimeters. The Small Bronzes, ranging in weight from less than 1 gram to over 2 grams, vary in diameter from less than 1 to about 1.5 centimeters, with most specimens clustering around 1.1 to 1.2 centimeters. Nothing is known of the actual value of the coins.

In silver, both drachms and tetradrachms were struck on the Rhodian standard[5] with the same types as the bronze. Although the

[3] Both pieces have been cleaned. The possibility that the cleaned specimens do not belong with the hoard has been considered, but this is the only case where they do not conform to the pattern created by the patinated coins.

[4] ΠΑΥΣΑΝΙΑΣ Milne, *NC* 1937, p. 167, no. 12 (Type I); Milne, *NC* 1937, p. 167, no. 16 (Type II). ΠΥΘΗΣ Milne, *NC* 1937, p. 167, no. 14 (Type I); *BMC* 97 (Type II).

[5] *BMC* 41–62; Copenhagen, *SNG* 569–586. A few rare issues are also known that appear to be struck on the Persian standard, J. G. Milne, "The Persian Standard in Ionia," *NC* 1924, pp. 19ff.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

TABLE I: Mean Weights of Erythraean Bronzes from the Fourth to Third Centuries B.C.

	Large Bronzes	*Middle Bronzes*	*Small Bronzes*
Type I, with legend without patronymic	11.4/11.8 (14)	3.4 (38)	1.9 (72)
Type II			1.8 (9)
Type I, with legend with patronymic	10.3/11.5 (2)	3.7 (9)	1.6 (1)
Type III	5.8 (50)		
Type V		3.2 (85)	
Type VI		3.3 (29)	
Type IV		3.1 (17)	
Type VII			1.6 (23)
Type VIII			1.2 (14)
Type IX			1.0 (19)

Weights are in grams. Numbers in parentheses indicate the number of weighed specimens considered in the tabulations.

coins' weight follows the local rather than Alexander's Attic standard, the similarity of the Heracles portrait on some of the Erythraean issues to that of the portrait on the Alexander coinage leaves little doubt that the Erythraean currency was influenced by the type of the Macedonian conqueror. This would suggest that the Anatolian coins cannot be earlier than 334 B.C. when the invading Greek army crossed into Asia Minor from Europe, but a date after 330 B.C. is much more likely. The type may have persisted into the third century, as there are changes in style which suggest that some issues are much

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

later than others. A few of the coins (presumably among the latest) include a patronymic with the magistrate's name on the reverse.

The magistrates' names suggest several conclusions about the fiscal policies that may have been in effect when this group of coins was minted. Several names appear on only a single coin, others occur on two or three different issues, and a few names have been noted from a whole range of coins in both silver and bronze. It would seem that there was no fixed policy with regard to the assigning of specific magistrates to specific denominations, implying that the moneyers were not annual officials who merely carried out a set policy. The apparently random magistracy pattern could suggest that the currency was based on a liturgy system whereby wealthy citizens made donations to the state and were then honored on those coins that were struck as a result of their donations, since with such an arrangement some individuals could contribute to more than a single issue, while others might even share the expense of an issue between two or more persons.

The dating suggested by the Alexander coinage can be reinforced by comparisons between the names on the coins and the corpus of extant inscriptions. Omitting the coins with single names, the present study has considered only the legends that include the patronymic because these seem to offer a much surer basis for comparison. Two men seem to occur in both contexts: ΒΙΩΝ ΠΥΘΕΑ, who issued coins in bronze,[6] also appears on inscriptions from Erythrae that can be dated to about 300 B.C.;[7] ΦΙΛΙΣΚΟΣ ΠΥΘΙΚΩΝΤΟΣ, a second moneyer,[8] was among those who purchased a priesthood at Erythrae in the third century B.C. and was accorded the honor of having his name inscribed on a marble stele, erected in the first half of the century.[9] These identifications of specific individuals

[6] *BMC* 85; Copenhagen, *SNG* 634.

[7] U. v. Wilamowitz-Moellendorff and P. Jacobsthal, "Nordionische Steine," *Abhandlungen der Königlich Preussischen Akademie der Wissenschaften* (1909), Abh. II, pp. 21–23.

[8] For the coins see Robert, *BCH* 57 (1933), p. 477, fig. 1; Milne, *NC* 1937, p. 168, no. 30.

[9] Or slightly earlier. See Robert *BCH* 57 (1933), p. 477; *Hellenica* 7 (1949), p. 88, note 1. For discussion of this inscription and for the earlier bibliography consult W. G. Forrest, "The Priesthoods of Erythrai," *BCH* 83 (1959),

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

confirm the previously suggested dating, and Types I–II can be assigned to the late fourth to early third century B.C. with some degree of certainty.[10]

Type III

Only one example of Type III was in the Erythraean hoard. The type's obverse is that of the youthful Heracles wearing the lion's skin, while its reverse employs the usual club, bow in case, abbreviation for the ethnic, and magistrate's name, with an added symbol of a bust of Heracles in three-quarter face. A countermark of a facing Helios was also struck on each side of the specimen that was found in the hoard.

This must have been a relatively long series, since about forty different magistrates' names have been recorded.[11] A few of the extant specimens are as large as the Type I Large Bronzes,[12] and although many pieces are not much larger than the Middle Bronzes of Type I, it is quite likely that Type III was intended to circulate as a Large Bronze, either with the same value as the Type I Large Bronzes (on a devalued scale) or with a slightly lower valuation (see Table I). Except for a rare type with a head of Athena on the obverse and a club with the EPY and the magistrate's name on the reverse,[13] no Small Bronzes can be linked to this series by the matching of the magistrates' names. For the Middle Bronzes, the name ΜΗΤΡΑΣ ΔΑΜΑΛΟΥ occurs both on coins from this series[14] and on examples from Types V and VI,[15] suggesting that Type III represents the large denomination that was minted immediately after the time of Types I–II, along with the Type V and Type VI Middle Bronzes.

The chronology suggested by the hoard is again borne out by the extant inscriptions, which place several of the Type III moneyers

pp. 513–522; G. Dunst, "Bemerkungen zu Griechischen Inschriften," *Sitzungsberichte der Deutschen Akademie der Wissenschaften zu Berlin* (1960), no. 1, pp. 5ff.

[10] For the possibility of a later dating for some pieces see below, note 31.

[11] *BMC* 153–196; Copenhagen, *SNG* 691–713.

[12] Copenhagen, *SNG* 711–712.

[13] Copenhagen, *SNG* 714.

[14] *BMC* 185.

[15] *McClean* 8162–3; *BMC* 114; Copenhagen, *SNG* 649, 661.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

in the third century B.C. Among the names inscribed on the ca. 300–250 B.C. stele that records the sale of priesthoods in Erythrae are the moneyers ΑΣΤΥΝΟΥΣ ΕΥΘΥΝΟΥ,[16] ΜΟΛΙΩΝ ΔΙΟΝΥΣΙΟΥ,[17] and ΚΑΛΛΙΩΝ ΦΥΛΑΡΧΟΥ.[18] In addition, some writers have restored the initial portion of the name [ΔΙΟΦΑΝ]ΤΟΣ ΚΤΗΣΙΚΡΑΤΟΣ[19] and the patronymic for ΑΝΑΞΑΓΟΡΑΣ [ΝΥΜΦΟΛΟΧΟΥ][20] on the inscription from the evidence of the Erythraean coins. A further date is provided by an inscription from Delphi which records that ΜΕΝΕΚΛΗΣ ΑΡΙΣΤΟΔΗΜΟΥ, a citizen of Erythrae, was made a *proxenos* at the mainland Greek sanctuary.[21] Other factors allow the inscription to be dated to about 240 B.C.,[22] and the Erythraean citizen can probably be identified as the same individual whose name is on several of the Type III coins,[23] including one from the hoard that is examined in the present study (no. 9). A third inscription, also from the third century B.C.,[24] includes the name of the moneyer ΕΚΑΤΩΝΥΜΟΣ ΜΗΤΡΟΔΩΡΟΥ in a list of Erythraean citizens.[25] Since these epigraphic comparisons leave little doubt that many of the Type III moneyers were active in the third century B.C., the coins must be placed in the same period.

Type IV

Two coins of Type IV were present in the hoard. Both show more wear than the single coin of Type III but less wear than most of the specimens of Types I–II. The obverse of Type IV, a bearded head of Heracles wearing the lion's skin headdress, is matched with the club, bow in case, and magistrate's name from the previous period,

[16] *BMC* 165–6; Copenhagen, *SNG* 708, 714; *McClean* 8169.
[17] *BMC* 186; Copenhagen, *SNG* 704–5.
[18] *BMC* 182.
[19] Gaebler, *Erythrä*, pp. 67, 84. For the coins see *BMC* 172.
[20] Robert, *BCH* 57 (1933), p. 478. For the coins see *BMC* 156; Copenhagen, *SNG* 692; *McClean* 8166.
[21] The comparison with the coin type is discussed by L. Robert, *RN* 1936, pp. 271–2; *Hellenica* 7 (1949), p. 87.
[22] For the bibliography for the inscription consult Robert, *RN* 1936, p. 271.
[23] *BMC* 183; Copenhagen, *SNG* 703.
[24] Christ, "Griechische Bildwerke und Inschriften aus der Sammlung des Herrn Hofrathes Dr. Pauli im k. Antiquarium," *Sitzungsberichte der königl. bayer. Akademie der Wissenschaften, München* (1886), p. 246.
[25] *BMC* 173.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

with some issues adding the symbol of a bee as well.[26] Only a few issues are known,[27] and the type is not likely to have been struck for more than a brief period. Its denomination is the Middle Bronze, with a marked devaluation from the previous era (see Table I). One of the Small Bronze issues from Erythrae uses an obverse of the head of Athena in a Corinthian helmet along with the name ΗΡΑΚΛΕΟΣ ΕΠΙΚΟΥΡΟΥ on the reverse,[28] and since this moneyer also struck coins in Type IV, it is likely that the Athena coins were minted at this time as a smaller denomination.

The general chronology for Type IV is established by the well-known inscription from Erythrae[29] which records the purchases of the Erythraean priesthoods. The ca. 300–250 B.C. listing includes the names of ΙΑΤΡΟΚΛΗΣ ΗΡΑΚΛΕΩΤΟΥ and ΔΗΜΗΤΡΙΟΣ ΑΠΕΛΛΙΟΥ, both of whom issued coins in this type.[30] This date goes well with the evidence from the hoard as both of the hoard's Type IV coins are significantly older than the coin of ΜΕΝΕΚΛΗΣ ΑΡΙΣΤΟΔΗΜΟΥ who was *proxenos* at Delphi around 240 B.C., so that Type IV can be placed in the first half of the third century. It thus has to be later than most of the specimens from Types I–II, but at our present level of knowledge, there is no way of deciding whether or not a few of the Type I coins could have overlapped chronologically with the later issues.[31]

Types V–VII

Types V, VI, and VII obviously form a single group. The obverses of the three types differ (Heracles for Type V, Dionysus for Type VI, and Athena for Type VII), but the same magistrates are to be found

[26] Issues which do not include the bee are usually countermarked with this motif. See H. Seyrig, "Antiquités Syriennes, 67. Monnaies contremarquées en Syrie," *Syria* 35 (1958), p. 189.
[27] *BMC* 201–213; Copenhagen, *SNG* 717–725.
[28] *BMC* 220.
[29] See above, note 9.
[30] *BMC* 201–202, 207–208.
[31] A few of the Type I issues in silver, especially those that are struck on the Persian standard, have sometimes been dated quite late on the basis of their portrait style. See the comments of Milne, *NC* 1924, p. 20, who places them at ca. 200 B.C. The dating of specific magistrates on these coins actually places the coins early in the third century B.C., but they could still postdate the first appearance of some of the other types.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

on the reverses of all three issues. In fact, Types V and VI share the same moneyers in every one of the twelve known issues.[32] The style of the reverse is now altered somewhat by the elimination of the usual symbols. Only the EPY and the magistrate's name remain, while a new symbol, a bunch of grapes, is added to the reverse of the Dionysus issue only (Type VI).

The hoard has many more examples of the coins from Types V–VII than from those in any other group. One could conclude that this situation implies a late date of issue and that there were a great many coins of these types in circulation at the time when the hoard was concealed, but the incomplete nature of the Erythraean hoard prevents any certain conclusions in this regard. Types V and VI certainly include some of the least worn specimens in the group, but a few of the pieces are quite worn. It is clear that no great time span can be interposed between the Dionysus/Heracles coins and the preceding types, and that the series was minted over a much longer period than the twelve years suggested by the twelve issues. The amount of wear does not clarify whether Type IV should be placed before or after this issue, and there may even have been some overlapping between "successive" types.

Type VII, in fact, is known to have been struck as the Small Bronze with a number of different larger denominations, as it shares the same magistrates with Types V–VI,[33] with Type IV (ΗΡΑΚΛΕΟΣ ΕΠΙΚΟΥΡΟΥ),[34] with an issue that has as obverse a bearded head of Heracles without the lion's skin (ΔΕΙΝΟΜ[Ε]ΝΗΣ ΗΡΑΚΛΕΟΥ),[35] and with a coin that employs as obverse a bearded head of Zeus (ΜΕΝΕΚΡΑΤΗΣ ΑΓΑΘΩΝΟΣ).[36] These issues would seem to span several centuries. Type III can best be dated around 300–200 B.C., one of the Athena coins (with the name of ΕΚΑΤΑΙΟΣ ΔΗΜΗΤΡΙΟΥ)[37] can be placed in the early second century B.C. because the same name

[32] *BMC* 102–125; Copenhagen, *SNG* 636–662.
[33] In several different cases. See *BMC* 126–134.
[34] *BMC* 220; Copenhagen, *SNG* 738. For the Type IV coins see *BMC* 211–213; Copenhagen, *SNG* 721–723.
[35] Copenhagen, *SNG* 735. For the bearded Heracles coin see *BMC* 216; Copenhagen, *SNG* 733.
[36] Copenhagen, *SNG* 739; *SNGv.Aulock* 1966. For the Zeus issue see Copenhagen, *SNG* 730.
[37] Copenhagen, *SNG* 737.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

can be found on a datable inscription from this period,[38] and the Zeus type with the coin of ΜΕΝΕΚΡΑΤΗΣ ΑΓΑΘΩΝΟΣ may be from the first century B.C.[39] While this seems to be a long time for the persistance of a single type, a more precise analysis will have to await additional evidence.[40] The two examples of Type VII which were found in the hoard are considerably worn, and they can clearly be assigned to the early third century.

The only comparison that has been noted between a magistrate from Types V and VI (Dionysus/Heracles) and the extant inscriptions concerns the moneyer ΔΑΜΑΛΗΣ ΑΡΧΕΑΝΑΚΤΟΥ.[41] The name [. . .]ΛΗΣ ΑΡΧΕΑΝΑΚΤΟΥ occurs on an inscription from about 300 B.C., and some writers would like to restore the name on the basis of the coinage.[42] If the identification is correct, Types V and VI should be placed early in the third century B.C. The evidence from the hoard is unfortunately too ambiguous to decide if Type IV or Types V–VI should be assigned the priority of date, and the available inscriptions offer little help on this close a dating problem. Since ΜΗΤΡΑΣ ΔΑΜΑΛΟΥ occurs on the Heracles/Dionysus coins[43] and reappears in Type III,[44] it is likely that this Large Bronze was minted at the same time as the two Middle Bronzes, but since Type III was an extremely long issue, one still cannot fix the relative chronology for Types IV and V–VI.

Some help in this matter may be offered by the tabulation of mean weights for the various denominations (Table I). In all of the cases except one where the relative chronology is known, the pattern of means for the late fourth and third centuries is always the same—the currency is gradually devalued. The only exception to this rule

[38] Dated before 167 B.C. See Robert, *BCH* 57 (1933), p. 481; *RN* 1936, p. 271.
[39] The name of another moneyer from this group seems to appear on an inscription from the first century B.C. See Dunst, "Griech. Inschrift.," p. 32.
[40] Stylistic differences in the shape of the helmet do not form a pattern that coincides with comparison of the magistrates, and it is possible that some of the collations with the inscriptions are with descendants rather than with the same individual.
[41] *BMC* 111; Copenhagen, *SNG* 642, 655; *SNGv.Aulock* 1960.
[42] Wilamowitz-Moellendorff and Jacobsthal, "Nordionische Steine," pp. 21–23; Robert, *BCH* 57 (1933), p. 480.
[43] *McClean* 8162–3; *BMC* 114; Copenhagen, *SNG* 649, 661.
[44] *BMC* 185.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

is the Type I Middle Bronzes which include the patronymic, but there are too few specimens in this category for the measurements to be regarded as valid.[45] When the Middle Bronzes of Types V and VI are put into this pattern, they seem to fit best immediately before the type with the obverse of the bearded Herakles (Type IV). This would fit well with the date of the fragmentary inscription mentioned above, but a difference of one tenth of a gram is not really enough to decide the issue with certainty. An opposite conclusion is suggested by Types VIII and IX, and a final solution will have to wait for further evidence.

Types VIII–IX

In Types VIII and IX are the least worn coins in the hoard. In both cases the obverse design (a facing Helios for Type VIII, a club for Type IX) is paired with a simple reverse of the EPY and the magistrate's name, without patronymic. There are no symbols on either obverse or reverse. Since there are no patronymics, comparisons with other names cannot suggest firm conclusions, and (perhaps random) matches can be made with the moneyers from all of the other types. The highest percentage of collations exists with Types V–VI, as fully half of the names from Types VIII and IX also appear on the Heracles/Dionysus issues. Since Types VIII and IX must be the latest Small Bronzes in the hoard, if they were minted with Types V–VI, then these issues are also late. It is possible, however, that the Small Bronzes with Helios or club of Heracles obverses were employed with more than a single larger denomination, some of which may not appear in the hoard.[46] The two Small Bronzes are probably successive issues, and both the relative wear of the specimens in the hoard and the general pattern of weight depreciation (see Table I) make the club type the later of the two.

[45] And the chronology is not than certain. Erythraean inscriptions from the early third century show that the use of the patronymic came in gradually, not all at once. See Wilamowitz-Moellendorff and Jacobsthal, "Nordionische Steine."

[46] None of the names on the Type VIII and IX coins in the hoard reappear in Types V or VI.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

CONCLUSION

In general, the hoard seems to include currency from two broad periods. The earliest issues, in Types I and II, come from a time when all three denominations were struck with the same design. Only occasionally was a different type used for one of the issues (as in Type II). Sometime during the course of this period, which can be assigned to the late fourth to early third century B.C., the currency began including the patronymic with the name of the moneyer on the reverse.

The remaining coins in the hoard can be assigned to a second period which begins with a devaluation of the currency and a shift in the designs on the coins. Different types were now employed for different denominations, but there is no visible change in the pattern of magistrates' names, and if a liturgy system was being used during the earlier period, it was probably still in effect. There is no evidence to suggest that the moneyers were regular civic officials. The devaluation of the currency, easily visible in the weights of the Small Bronzes (Table I), probably continued throughout the period. Datable inscriptions which include the names of some of the moneyers place the issues from this group firmly in the third century B.C., but their final date is not yet completely clear. The latest indication of date for the material in the hoard comes from the ca. 240 B.C. inscription which mentions the name of Μενεκλῆς Ἀριστοδήμου, who also appears on the only slightly worn coin from Type III. This evidence would seem to indicate that the latest coins in the hoard can be no later than the early second century B.C., with a date in the second half of the third century presenting a much more likely possibility. In Erythraean history, this was a time of unparalleled prosperity.[47]

The conquest of Asia Minor by Alexander had led to a rapid increase in east-west trade, and the earliest coins in the hoard were probably minted to meet the demands for additional currency at this time. We know from a later inscription[48] that Erythrae was not

[47] For a good recent survey of the general events of this period including references to both the literary and the epigraphic sources, see É. Will, *Histoire Politique du Monde Hellénistique* (Nancy, 1966).

[48] See below, note 51.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

forced to pay tribute under either Alexander or Antigonus. The coinage of Type I must be regarded as one of the tangible results of this autonomy, since it coincides with the emission of a series in silver with the same obverse and reverse types.

The defeat of Antigonus in 301 B.C. brought much of the Near East to Seleucus and Lysimachus, and the latter was quick to exercise his control over the coastal cities of Asia Minor. There is no evidence, however, that Lysimachus minted at Erythrae.[49] If the first period ended during or at the end of his reign, the second period may have begun with the era of uneasy prosperity that followed the death of Lysimachus at the Battle of Corupedium in 281 B.C. Now under the control of Seleucus, the city probably employed Seleucid silver and may or may not have minted its own bronze. Little is known of the relationship between Seleucus and Erythrae, although the general policy of the ruler seems to have been much more lenient than that of his predecessor. While the citizens of Erythrae made a concerted effort to appease their new ruler by naming a festival after him,[50] history does not record how he received their overtures in the few months of his reign that followed the Battle of Corupedium. The last possible date for the beginning of the second period would have to coincide with the reign of Antiochus I (281–261 B.C.). A letter that is probably from this period[51] records that Erythrae was granted certain special immunities from taxation by the Seleucid ruler, and it is possible that an increased autonomy of this nature could have been the occasion for a revival of the local

[49] The issues listed by L. Müller, *Die Münzen des Thracischen Königs Lysimachus* (Copenhagen, 1858), nos. 409–419, are now generally given to Cius (posthumous), see *SNGBerry* 450–451.

[50] W. Dittenberger, *Sylloge Inscriptionum Graecorum* (3rd ed., Leipzig, 1915–1924), p. 412.

[51] E. Michel, *Recueil d'inscriptions grecques* (Brussels, 1900), p. 37, with additional references; W. Dittenberger, *Orientis Graeci Inscriptiones Selectae* (1902–5), p. 223. For a possible dating in the time of Antiochus II, see C. B. Welles, *Royal Correspondence in the Hellenistic Period* (New Haven, 1934), p. 15. The earlier dating is preferred by Will, *Histoire Politique*, pp. 118–119, who cites similar policies for the other cities of coastal Ionia in the time of Antiochus I, and by D. Magie, *Roman Rule in Asia Minor* (Princeton, 1950), p. 928, note 23, who reviews the arguments on both sides and points out that an inscription from Erythrae shows that the city must have been free by early in the reign of Antiochus II (Dittenberger, *SIG*, p. 442).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

currency. Since the inscription is careful to recall the similar privileges that had been bestowed on the city by Alexander and Antigonus, a renewal of the autonomous coinage would seem perfectly natural. From the evidence of the hoard, one can assume that the city had its own currency by well before the middle of the third century B.C.

The early Hellenistic period must have been a time of great commercial activity at Erythrae. A few clouds hung over the city because the entire area was menaced by the Gauls, but Erythrae itself was never attacked, and it managed to survive the internecine warfare of Alexander's successors as well. That the city's economic interests continued to flourish is demonstrated by a number of extant sources including the local bronze coinage, which seems to have been minted in large quantities throughout most of the third century.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

THE PELOPONNESIAN ALEXANDERS[1]

(PLATES IX–XX) (HYLA A. TROXELL)

In 1962 the American Numismatic Society acquired a hoard of nine tetradrachms bearing Alexander's types. One coin is inscribed with the name of Areus of Sparta; the remainder, with Alexander's name, appear to be third century issues of uncertain Peloponnesian mints. The hoard was understood to have been found in the Peloponnese; a more exact provenance could not be determined. That the hoard is complete, at least in regard to the classes it comprises, is made probable by the fact that no similar coins appeared on the market in the several succeeding years. The coins are catalogued and discussed below, after a review of other Alexanders from the Peloponnese.

[1] Such was not my original intention, but a large portion of this work has turned out to be commentary on two publications of the late S. P. Noe (see note 2). The reader is urged to have them, with their copious illustrations which are not repeated here, in hand.

Hoards cited in this article are listed on pp. 81–90, together with suggested burial dates, selected references and/or brief descriptions, and commentary where appropriate.

Dates given are those used in the *CAH*. The numbering of the passages from the ancient authors is in general that of the Loeb editions.

My thanks are due to many for help with this article. Mrs. Susanne Grunauer of Munich, Mlle. Monique Mainjonet of the Bibliothèque Nationale in Paris, Dr. Irwin Merker of Rutgers University, Mme. Mando Oeconomides of the National Museums in Athens, Dr. M. Jessop Price of the British Museum, Dr. Hans-Dietrich Schultz of the Staatliche Museen in Berlin, and Dr. Henri Seyrig have kindly supplied me with casts, photos and information. Dr. Price has shared with me the relevant data from his dissertation on the Corinthian mint, and Dr. Christof Boehringer of the University of Gottingen has sent me, in advance of publication, his dating of the Alexanders of Perga, Phaselis, and Aspendus. Dr. Otto Mørkholm of the National Museum in Copenhagen and Dr. Seyrig have read preliminary manuscripts and offered numerous helpful suggestions. And Miss Margaret Thompson, whose scholarship is exceeded only by her kind heart, has aided and encouraged me continually in every way. Whatever errors of fact or judgment which remain after so much consultation, however, I claim as my own.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Three Peloponnesian mints which struck Alexanders have been published: Sicyon, Argos, and Megalopolis.[2] Numerous additional issues from undetermined mints are known, many unpublished, but the amount of material available, very small, has allowed few firm groupings. It is these issues which compose our hoard. The present article will reexamine the chronology and attribution of the issues previously assigned to Sicyon, and the chronology of those assigned to Argos and Megalopolis, and will suggest that other Peloponnesian mints also briefly struck Alexanders. New evidence requires a somewhat different view of these published mints, which aids in the interpretation of the present hoard. Two tentative groupings, each containing hoard issues as well as others, will be suggested, along with extremely tentative proposals for the groups' attributions and dating.

SICYON RECONSIDERED

The first Peloponnesian Alexander mint to be published was Sicyon. This was done in 1950 by the late Sydney P. Noe, working from the notes and the coin and cast trays of E. T. Newell at the ANS. The issues he attributed in *ANSNS* 6 to Sicyon fall into a number of separate groups, which will be considered separately.

ANSNS 6, Issues 1–16

Issues 1–16, which include gold issues of both single and double staters, appear a firm group, and can be securely dated, as Noe states, prior to at least 318, as many of its silver components occur in the Demanhur Hoard buried that year. If truly struck at Sicyon, however, they must, as Bellinger has noted,[3] antedate 323. Sicyon in that year joined Athens in the Lamian War, and the likelihood is very slight that the city struck indistinguishable issues both under Macedonian domination and immediately afterward, when in open rebellion.

[2] S. P. Noe, *The Alexander Coinage of Sicyon*, *ANSNS* 6 (New York, 1950). Noe summarized the Alexander issues of Argos and Megalopolis in an appendix, pp. 37–41, to "The Corinth Hoard of 1938," *ANSMN* 10 (1962).

[3] A. R. Bellinger, *Essays on the Coinage of Alexander the Great*, *ANSNS* 11 (New York, 1963), pp. 58–9. Bellinger would date them, if the eight symbols can be taken as indicating eight annual issues, 330/29–323.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Certain of these issues were first ascribed to Sicyon by Babelon, who connected the naked youthful figure found on many of them with the undoubtedly Sicyonian symbol of youth with fillet found on the later issues 43–57 (see below).[4] Newell thought he had proof of the connection in a specimen of the earlier series showing a dove with the youth,[5] as sometimes occurs on the later coins, but this early "dove" has since been shown to be merely a die break.[6] Newell also concurred in the attribution to Sicyon because he thought that an active mint in the Peloponnese was needed to supply the mercenary recruiting ground at Taenarum, the southernmost tip of the peninsula. How necessary a nearby mint was may be questioned, however; Sicyon, furthermore, is hardly nearby; and in any case Taenarum was no longer active after the end of the fourth century.[7]

The attribution of these issues to Sicyon is tenuous in the extreme. It rests solely on the identification of the earlier and later naked-figure symbols, an identification which is highly dubious. Their attitudes are entirely different; the later figures stand on a base, indicating a statue representation, while the earlier ones do not; and the earlier figures lack the invariable fillet of the later ones.[8] No literary or historical evidence suggests Sicyon. Corinth, seat of the Hellenic League and a secure and easily held locality, would have been the obvious choice of Alexander or of any conqueror for a Peloponnesian mint, and the reattribution of most of the succeeding *ANSNS* 6, issues 17–42 to that city will be suggested below. But Corinth under Alexander struck her own *poloi* in great abundance,[9]

[4] E. Babelon, "Mélanges et documents VIII. Le devin de Sicyone," *RN* 1904, pp. 117–133. The distinctive youth with fillet occurs on Sicyonian bronze: Babelon, p. 121, fig. 5; *BMC*, pl. VIII, 20; *ANSNS* 6, pl. XVIII.

[5] *Alexander Hoards II. Demanhur*, *ANSNNM* 19 (New York, 1923), pp. 77–80.

[6] Noe, "Greek Coins Acquired by the American Numismatic Society in 1947," *ANSMN* 3 (1948), pp. 2–3; *ANSNS* 6, p. 25.

[7] G. T. Griffith, *The Mercenaries of the Hellenistic World* (Cambridge, 1935), pp. 259–60.

[8] Some Imperial bronzes of Sicyon bear as type a naked standing figure, arms stretched out in front (F. Imhoof-Blumer and P. Gardner, *A Numismatic Commentary on Pausanias* [London, n. d.], pl. H, VIII and IX). At first glance this bears some resemblance to the naked-figure symbols of issues 1–16, but the resemblance is illusory as the Imperial figure is bearing a fillet (often indistinct) and thus relates rather to the youth with fillet of the later issues *ANSNS* 6, 43–57, about whose Sicyonian origin there is no question.

[9] See below, p. 47.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

and there are no correspondences between them and *ANSNS* 6, issues 1–16 such as there are between *ANSNS* 6, issues 17–42 and contemporary Corinthian bronze strikings.

Indeed, there is no urgent reason to consider issues 1–16 Peloponnesian at all. As the area had no source of gold, one must postulate either that Alexander sent bullion from Macedonia or the East, or that the substantial amount of gold necessary for the heavy gold issues was obtained locally from existing treasures public or private. Either seems improbable. It is noteworthy, too, that these issues, unlike the following 22–36, do not appear in Peloponnesian or mainland Greek hoards.[10]

Although the style of 1–16 is strongly Macedonian, the issues cannot be fitted into Newell's tight sequences at Amphipolis or Pella. A third mint in Macedon, or possibly one to the east, seems to the present writer equally as probable as one in the Peloponnese. The large issues of gold distaters, otherwise almost exclusively a Macedonian denomination, would seem to favor that area. The suggestion of a specific alternate, however, lies outside of the scope of the present article. The place of origin of these issues in any case has little or no bearing on the attribution of the succeeding *ANSNS* 6 issues.

ANSNS 6, Issues 17–42

Most of these issues can be securely dated prior to 280 at the latest by their frequent occurrence in the many hoards interred at that time.[11] A few issues seem doubtfully part of the sequence, and very possibly not strikings of the main mint, which, it will be suggested here, was not Sicyon but Corinth.

Ptolemy I occupied both cities from 308 to 306, and struck coins of his own types at Corinth (see below, p. 47). Demetrius "freed" both cities, which had been briefly controlled by Cassander, in 303. To the period of Demetrius' first occupation of Sicyon, 303–301, Noe

[10] With one exception, a tetradrachm of issue 14 in the Epidaurus Hoard. By contrast, issues 22–36 are represented in six Peloponnesian hoards: Argos 1967, Corinth 1960, Epidaurus, Megalopolis, Olympia, and Sparta; and in seven or eight from northern Greece: Dokimion, Kiouleler, Macedonia 1961, Pontoleivado-Kilkis, Prilepec, possibly Salonica, Serbia, and Trikkala.

[11] Armenak, Corinth 1960, Epidaurus, Kiouleler, Macedonia 1961, Mersin (?) 1966, Pontoleivado-Kilkis, Prilepec.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

assigns issues 17–21. Issues 20 and 21 (differentiated only by the presence or absence of ΒΑΣΙΛΕΩΣ) appear doubtfully part of the sequence. Neither symbol nor letter have parallels in other issues, and both the markings and the different and superior obverse style interrupt the regular progression of the other issues. Issue 19, again of peculiar obverse style and unrelated markings, might also be rejected from the series, but for an issue unknown to Noe.[12] This issue, from an obverse very similar to 19's, bears the same symbol of dove in wreath, and, below the throne, H, engraved perhaps as an afterthought, overlapping the exergue line – precisely as on Noe's 25.4 (symbol chimaera), where the form of the usual monogram ⊬ appears to be H also. Issues 17—21, strangely, are known from no hoards, but their chronology cannot be too different from that of the following groups.

Issues 22–36, employing at least 42 obverse dies, form a coherent group closely connected by die linkage, style, and reverse markings. As noted, this large output is securely dated prior to ca. 280 at the latest. It is reasonable to assume that the bulk of it was struck in connection with Demetrius' preparations for his reinvasion of Asia in 287, although Antigonus Gonatas, left behind, may have continued to supply him with coin until his defeat in 285.

Noe suggests that the aphlaston of issues 28–31 and the cornucopiae of issue 35 may refer to Demetrius' victorious return to Sicyon in 290; issues 21–7 (without the title ΒΑΣΙΛΕΩΣ of preceding and succeeding issues) he dates between 301 and 290, considering the the earlier issues autonomous, for Sicyon rebelled after Ipsus and was retaken by Demetrius probably in 295. Again, it seems unlikely to the present writer that Sicyon after overthrowing Macedonian dominion would have continued issuing Macedonian coinage; and even if such were the case, why would the title not have been replaced promptly on Demetrius' retaking of the city, rather than only in 290?[13] The rather puzzling dropping and subsequent resump-

[12] Two coins of this issue, from the same dies, are known to me: Stockholm (E. von Post), ↑ 16.78 (PLATE XIX, 6) and Paris, ↑ 17.00.

[13] The title first reappears on issue 30 in Noe's compilation, but is present on a coin (new dies) of issue 28 unknown to Noe (PLATE XIX, 7). Otto Mørkholm has rightly pointed out that, judging from the progression of the die flaw on the nose of Noe's die A 57, the order of issues should be 30–28–29. The pattern of die linkage is such, however, that, the issues must have been nearly if not completely contemporary.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

tion of the title may well be explained at Corinth respectively by the death of Antigonus I Monopthalmus, and by the revival of great expectations connected with his son's extensive preparations for reinvading Asia – the greatest such preparations since Alexander, according to Plutarch (*Demetrius* 43–4). The presence or absence of the title may have had little significance, actually, beyond current fashion, and surely it is more satisfactory to assign the otherwise uniform series to a city under continuous government than to one undergoing revolt and recapture.

Issues 37–9 and 40–2 also seem to have no firm reason for inclusion in the series. Again, their obverse styles and reverse markings have no parallels in other issues, and issue 40 again drops the title. The earlier group is contemporary with that just discussed, as an example of issue 37 occurred in a recent hoard (Mersin 1966) evidently contemporary with the many buried in the troubled times around 280. Issues 40–2 present multiple problems, and will be discussed below (pp. 68–79).

Thus the great majority of issues 17–42 can be shown to date from before 280 B.C. at the latest. As will be shown below, the bulk of the succeeding issues in Noe's compilation must be dated considerably later in the third century, probably after ca. 250. Some two decades probably also separate these middle issues from the earlier issues 1–16, and there is no evidence in the coins themselves to connect these middle issues with either the questionably Sicyonian 1–16 or the definitely Sicyonian 43–57.[14]

Corinth seems in many ways a far more probable mint than Sicyon for these large issues (17–18, 22–36, possibly 37–9 and others). Newell rejected Corinth as a Peloponnesian mint for a group of Demetrius Poliorcetes' issues with his own types in ca. 290 because he believed the city was still then striking its own staters. "Numismatic writers have almost universally assumed that the Corinthian *poloi* continued to appear throughout the first half of the third

[14] Noe, it is true, mentions the dove in wreath and the chimaera of issues 19 and 24–5 as distinctive emblems of Sicyon, but it must be pointed out that both symbols appear on Corinthian staters of the later fourth century (O. Ravel, *Les 'Poulains' de Corinthe*, II, (London, 1948), nos. 1029 and 1010–11, the former described as "common; many dies"). The chimaera, too, was used as a Corinthian type on half-staters.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

century B.C. ... Certainly the present writer knows of no really tangible evidence to controvert the accepted view." Newell then suggested a Sicyonian origin for the issues in question.[15] The same circumstance undoubtedly prompted his attribution of the Alexander-type tetradrachms to Sicyon rather than Corinth.

Tangible evidence has since appeared, however, to date the cessation of the regular stater issues of Corinth. O. Ravel in 1932 questioned the long-held assumption that the Macedonians allowed Corinth to continue striking into the third century, noting the complete lack of any supporting textual or other evidence, and suggesting that the staters ended late in the fourth century, perhaps ca. 310.[16] As promptly as any scholar could wish, his proof appeared the following year in the Chiliomodi Hoard, found near Corinth. The last regular issues of staters, previously identified but not dated by both Ravel and C. Oman,[17] appeared in this hoard together with f.d.c. specimens of both Corinthian and Ptolemaic drachms with initials ΔO. That the latter were struck in Corinth during Ptolemy's occupation of 308–306 seems certain,[18] and thus the latest regular stater issues can be dated just prior to 308.

[15] *The Coinages of Demetrius Poliorcetes* (London, 1927), pp. 145–6. The order of the issues there tentatively ascribed by Newell to Sicyon-Demetrias, whatever their proper attribution may be, should probably be reversed. Not noted by Newell is the fact that the reverse dies of the coins shown on pl. XVI, 12 and 15, are the same, but with a recut monogram. The recutting was extremely competent, but from the casts at the ANS it *appears* that XVI, 12 is the later stage—which necessitates reversing the order of all the issues. The issue Newell placed first chronologically (no. 155; pl. XVI, 10) is described as having the name to the right and the title to left, which if true would indeed place it prior to 291–0 and to the rest of the "Sicyon-Demetrias" issues with the reverse arrangement of the inscription (see note 65). But the inscription on no. 155 is not placed as described: its arrangement is the same as that of the issues grouped with it. This makes possible the suggested reversal of the issues' order.

[16] *Corinthian Hoards*, *ANSNNM* 52 (New York, 1932), p. 22.

[17] "Some Problems of the Later Coinage of Corinth," *NC* 1926, pp. 23–5.

[18] Ravel, "A Corinthian Hoard from Chiliomodi," *Trans. Int. Num. Cong.* (London, 1938), pp. 104–5. In further support of Ravel, I might mention that O. Zervos, now preparing his dissertation on the early coins of Ptolemy I, informs me that although the Chiliomodi Hoard provides the only known provenance for these Ptolemaic ΔO drachms, of somewhat different style from that of other Ptolemaic drachms, none are in the museum at Alexandria. This also supports a non-Egyptian origin.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Noe notes this Ptolemaic issue at Corinth and suggests that the Sicyon mint was closed during Ptolemy's occupation, as such a nearby mint would be superfluous. It would seem more probable that the Sicyon mint, if indeed it ever existed, had ceased operating in 323; and that from the time of Ptolemy's occupation Corinth was the local mint used by the Macedonian occupiers of the Peloponnese. The earliest of the Alexander tetradrachms here considered may have been struck under Cassander, 306–303, but it is equally probable that they are all issues of Demetrius, who held the city continuously from 303. As noted above, ascribing these issues to Sicyon necessitates either a gap in the series or the unlikely assumption that Sicyon during the period of its autonomy, 301–ca. 295, continued to issue the coins of its occupiers. No such problem arises at Corinth.

A Corinthian origin cannot be proved, but seems most probable for a number of reasons. The markings on the coins are reminiscent of those on the preceding Corinthian staters: the many exquisitely detailed figures as symbols, and the almost constant use of two letters to indicate the "magistrates." The letters ΔO occur on the unique last regular stater of Corinth[19] and on the Corinthian and Ptolemaic drachms from the Chiliomodi Hoard; Δ and ΔO are frequent markings on the Alexander issues in question. This correspondence, while it cannot be pressed, is at least worth noting.

Numerous correspondences exist as well between issues 22–36 and the Corinthian bronzes of the common issue with Pegasus and trident, which in the *BMC* is assigned not too helpfully to the period 404–146. M. Jessop Price, who for some time has been working on Corinthian bronze,[20] has kindly sent me a list of the Pegasus- trident issues which he believes belong to the time of Demetrius Poliorcetes at Corinth.[21]

[19] Ravel, '*Poulains*,' no. 1091 = *SNG Lockett* 2103.

[20] E.g., "Coins from Some Deposits in the South Stoa at Corinth," *Hesperia* 1967, pp. 348–388.

[21] Dr. Price, in fact, has for some time been convinced that the tetradrachms in question were struck at Corinth, and has already expressed this view in his dissertation (unpublished; Cambridge, 1967). Some rough dating of the bronze issues is attempted in the article cited in note 20, but he has now communicated to me his more precise dating of the issues here listed: "Their date is without doubt. A *terminus ante quem* is given by the Abaton Hoard (Noe 270) and the cistern I–L:15–16 (Museum East) at Corinth. The hoard was probably deposited in the first quarter of the third century; the cistern

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

*1. Nike ⊛
*2. Tyche ⊛
*3. ⊛ dove
4. Ω ⊛
5. double axe (⚒)
*6. cornucopiae
*7. aphlaston Δ or ⍙ or ΔΩ[22]
8. ⍙
*9. amphora ΔΩ[23]
10. H wreath
11. torch
12. griffin

The six starred issues Price believes correlate with the tetradrachms. While the representations of the Nike and the Tyche (or Demeter) do not correspond exactly on the two series, those of the aphlaston and the amphora, with its flat base and its cover in place, seem unmistakably the same; and in defense of the other correlations may be cited the varying representations of one deity commonly found on late fourth century staters of Corinth,[24] as well as the different sizes of the two denominations. Further, to the six issues cited by Price may possibly be added his no. 10, as the issue unknown to Noe (above, p. 45, and PLATE XIX, 7) bears dove in wreath and H.

Nos. 1–4 of Price's issues bear the same monogram; nos. 7–9 are again related by common lettering. There may be a link between

filled possibly 275, certainly before 250. A *terminus post quem* is provided by the Potters Quarter which fell into disuse at the end of the fourth century." (Cistern I–L: 15–16 was published as Cistern F by Saul S. Weinberg, "A Cross-section of Corinthian Antiquities (Excavations of 1940)," *Hesperia* 1948, pp. 229–236).

Mention may also be made of a small hoard of bronzes found recently at Chandrinus, in the eparchy of Pylus. It is dated to the first quarter of the third century, but whether by Mme. Varoucha-Christodoulopoulou, who published the hoard report, or by Prof. S. Marinatos, source of the date, is not clear, nor is the reason for the dating. But the hoard contained three Corinthian Pegasus-trident bronzes: one with Athena Nikephoros as symbol, one with amphora and Δ (no doubt part of ΔΩ), and one with H and wreath. This agrees perfectly with Price's dating.

[22] See PLATE XIX, 8, and *SNG Cop.* 180–1, where the symbol is called a palm.
[23] See PLATE XIX, 9, and *SNG Cop.* 182, where the symbol is called a vase.
[24] E.g., Ravel, '*Poulains*,' nos. 1076–1081, showing Artemis in six different attitudes.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the two series in a coin reported by Edwards[25] with, uniquely, two symbols (Nike and amphora) if the coin was accurately observed. Dr. Price, who believes he has seen all the coins Miss Edwards did, has not remarked this combination, but finds it difficult to ascribe her description to simple error. Nine of the twelve Corinthian bronze issues struck under Demetrius, then, are interrelated and at least six have correspondences with the tetradrachm series. No such parallelism can be demonstrated at Sicyon.

Historically the case for Corinth is overwhelming. The key to the Peloponnese, she was the chief base and port of any foreign occupier of the peninsula. Although several times taken by external powers, she seems never to have revolted against her rulers. While this might be ascribed to a lack of spirit in this commercial city, it is more probably due to what must have been the great size and effectiveness of the ever present garrison. Corinth was Demetrius' key holding in the Peloponnese; it was the seat of his Hellenic League; it had heavy revenues from port taxes to serve as a source of bullion. Above all, it was uniquely secure and the very place where money was needed—both for garrison pay and mercenary recruiting, and, in the years 290–288, for ship-building and other preparations involved in Demetrius' last great ill-fated enterprise.

To the years 290–288 Newell ascribes Demetrius' immense issues at Amphipolis and Pella (where he was also building ships) of coins bearing his own types.[26] No doubt similar in both date and purpose are most if not all of the large Alexander issues at Corinth.[27]

[25] K. M. Edwards, *Corinth* VI, *Coins* (Cambridge, 1933), p. 15.

[26] *Demetrius Poliorcetes*, pp. 92–7 and 108–13.

[27] Although puzzled by its usual significance as indicating a naval victory, Noe would assign the aphlaston and related issues to ca. 290 B.C., connecting them to Demetrius' victorious return to Sicyon after consolidating the major part of Greece. Now, it is precisely to 292–290 that Newell dates Demetrius' brief Macedonian issues with reverse type of seated Poseidon holding an aphlaston—an aphlaston identical to that on the Alexanders in question (*Demetrius Poliorcetes*, pp. 83–6 and 103–6). Poseidon, ever Demetrius' especial deity, was actually termed Demetrius' father in a fulsome hymn sung in Demetrius' honor on his state entry into Athens in 290 (Athenaeus, 6. 253e). The aphlaston, then, which in 290 can hardly refer to a victory at sea, may very well refer to Poseidon and to Demetrius' close relationship with that god. Similarly, although it is perhaps fanciful to interpret these symbols too closely, there may be some connection between the Demeter and cornucopiae of

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

ANSNS 6, Issues 43–70

Nos. 43–57 have as symbol a naked youth, arms raised, holding a long knotted fillet which falls behind his back. Accessory symbols (dove, wreath, crescent, and large Σ) are also found. This figure of the youth with the fillet makes its sole other numismatic appearance on Sicyonian bronze, and has been extensively discussed.[28] These markings are unmistakably civic, and with one exception this series of tetradrachms, nos. 43–57, is unquestionably Sicyonian.

The one probable exception is no. 43. A specimen of this issue occurred in the Mersin(?) Hoard of 1966 and thus the issue must be roughly contemporary with issues 22–36 at Corinth. The symbol (although reversed) is the same as that on the succeeding issues attributed to Sicyon, but the balance of evidence nevertheless appears to indicate a Corinthian origin. The letters NO are in constant use at Corinth; the style agrees perfectly; and two other symbols usually although not exclusively associated with Sicyon have been found in the tetradrachm series at Corinth: the chimaera and the dove in wreath. Further, whatever the precise significance of the markings on Peloponnesian Alexanders, they do not appear *at this time*, early in the third century, to have been civic.

It is indeed conceivable that Demetrius, in his great preparations of 290–288, opened other Peloponnesian mints in addition to Corinth.[29]

issues 35–6 and the fact that this hymn also played on the similarity of the names Demetrius and Demeter. If these conjectures have any basis, they connect issues 28 ff. with the years immediately preceding and following 290 B.C.

[28] E.g., see note 4. Two recent publications refer to earlier discussions: *ANSNS* 6, p. 25; and, especially, D. M. Robinson, "The Alexander Hoard of Megalopolis," *ANSMN* 4 (1950), pp. 17–19.

[29] It must be mentioned that the letters NO and ΔO, found at Corinth, appear on a number of contemporary issues which cannot be fitted into the sequence at that mint. One with dolphin and NO, and a style very similar to *ANSNS* 6, issues 22–36, occurred in the Armenak Hd. of 280 (PLATE XIX, 4). Other coins known from this issue lead into a series of quite different style and more elaborate markings, whose interpretation lies outside the scope of the present paper. Newell's coins of these issues, once in his Sicyon tray at the ANS, had been moved by him before his death to his Uncertain Greece and Peloponnesian trays.

The Armenak Hoard also contained a coin with markings of fulmen and ΔO (PLATE XIX, 5). Its obverse die is that discussed in my note 72, q. v. Corinth Hoard 146 (from the same obverse die) and 147 bear aphlaston and ΔO.

Other issues marked with ΔO, of uncertain date, are represented by Corinth Hoard 148, with cock, and *SNG Berry* 300, with tripod.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Were there other issues to group with no. 43, an auxiliary mint at Sicyon in the 280's might be postulated, but there seem to be none, and a second mint would scarcely have been opened for one small issue. Perhaps this early fillet-boy striking commemorates some especial contribution of Sicyon to the outpouring at Corinth, but it may merely have to do with some official with personal ties to Sicyon.

ANSNS 6, issue 44 is transitional between no. 43, wherever struck, and nos. 45–57. Its obverse style is good, and the title is still present—but the scale and orientation of the symbol, the scale of the reverse type and the emphasis on the upper back of the throne, and especially the unusual monogram ΦΣ (found on the extremely crude 53.2) all argue for not only a Sicyonian origin but a date closer to the succeeding issues than to no. 43.

ANSNS 6, issues 44–57 then are indeed Sicyonian. As their historical interpretation must be considered together with that of *ANSNS* 6, issues 58–70 and other late third-century Peloponnesian Alexanders, the following discussion includes the late issues of Argos and Megalopolis as well as an unpublished issue of Messene and possible issues of Hermione and Pellene. In my opinion *ANSNS* 6, issues 58–70 were struck by still other mints, one of them Corinth.

Noe, following the opinion held universally until very recently that the member-states of the Achaean League commenced striking the League triobols promptly on joining the League, dates all of his *ANSNS* 6 issues prior to 251, the year of Sicyon's entry. Similarly, he dates late Alexander tetradrachms of Megalopolis and Argos, analogous in every way to *ANSNS* 6, issues 45–57, to the years preceding their admission to the League (235 and 229 B.C., respectively).[30] Study of the recent Agrinion Hoard has shown conclusively, however, that the great bulk of the League triobols commenced only in the early second century.[31] This necessitates a reconsideration of

[30] *ANSMN* 10, pp. 38 and 40.

[31] M. Thompson, *The Agrinion Hoard*, *ANSNNM* 159 (New York, 1968), 89–90 and *passim*. This second-century starting date for the Achaean League triobols is true with one small exception. The great bulk of the money, with control markings on the reverse, was preceded by anepigraphic issues, apparently quite small and struck over a limited period, which extended back into the third century. Only nine coins of this type were known to Thompson (pp. 85–6), and they will not be further considered in this article.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the previously accepted *termini ante quem* for these late Peloponnesian Alexanders.

The three series of issues must be roughly contemporary. All (save the problematical *ANSNS* 6, issues 43–4) omit the title. All have moderately spread flans, with sharp edges. Not apparent on the *ANSNS* 6 plates but quite clear on examination of the coins is a distinct change in fabric between nos. 45–57 and earlier issues: the later, civic, issues are flatter, with sharply defined edges perpendicular to the faces, quite different from the rounded, swelling forms of the earlier coins. The later issues employ monograms instead of simple letters. And some issues are found together in hoards in approximately the same condition: Sicyon and Megalopolis in the Megalopolis Hoard buried ca. 223 and in the Greece(?) 1924 Hoard of uncertain date; Megalopolis and Argos in the Corinth Hoard of ca. 215 and the Ayaz In Hoard of ca. 190–188; Sicyon and Argos in the Patras Hoard buried perhaps in 218 and in the Mektepini Hoard of ca. 190–188.

Noe has tabulated, on criteria other than hoard provenance, the issues known for Argos and Megalopolis; and the hoard evidence, scanty as it is, and inconclusive for Megalopolis, bears out his arrangement of the Argive issues.

What of *ANSNS* 6, issues 58–70? These issues fall into four groups, which will be considered separately: 58–62, extremely close in style, with symbol horizontal trident or Athena; 63, with symbol Dioscuri; 64–6, with vertical trident; and 67–70, with winged fulmen.

Issue 58, with horizontal trident, is so close in style to nos. 59–61 that it is probably by the same hand. Issue 62 varies stylistically from 58–61 — Athena's pose is different and the lettering is unique. It may not belong with 58–61, but in any case it is known to us from but a single coin.

Another characteristic sets issues 58–61 apart from the other *ANSNS* 6 issues. Noe did not indicate relative die axes in his publication, stating that they were random throughout. So far as the present author can judge, this is true with few exceptions, among them issues 58–61. For issue 58 I have been able to record six axes: 5 ↑ and 1 ↗; for issues 59–61 twenty-four: 17 ↑ and 7 ↗. These adjusted die positions serve both to connect the trident and Athena

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

issues and to separate them from the other issues presented in *ANSNS* 6. Issue 62, with a single inconclusive axis of ↖, remains in doubt, and will not be further considered.

If 58–61 were not Sicyonian, where were they struck? The trident, apt symbol for a port city, occurs frequently on Corinthian bronze, and also on early second-century Achaean League triobols ascribed by Miss Thompson to Patras.[32] The two known provenances of issues 58–61 are the hoards found at precisely these two cities. The representation of Athena with the owl perched on her spear is distinctive, and is shown by the base-line to derive from a statue, but a description of such a statue is unfortunately not to be found in our accounts of works of the period.[33] The precise detailing of the figure, however, and the very presence of the base-line are most reminiscent of Corinthian work, and, as no silver coinage can be demonstrated for Patras before the League coinage mentioned, Corinth is the more likely mint for issues 58–61.

Other coinage has recently been ascribed to Corinth late in the third century, during Antigonus Doson's stay there in 224–222. Two tetradrachms of Doson are known with symbol of ornamented trident, just such a trident as is found on Corinthian bronzes and on our Alexander tetradrachms.[34] Irwin Merker suggests that Doson's tetradrachms were struck at Corinth.[35] He would also attribute to this period, 224–222, the Corinthian bronzes with obverse type of Poseidon's head, as on Antigonus Doson's tetradrachms.[36] It will be suggested below that issues 58–61 and perhaps 63 were struck at Corinth under Philip V, during the Social War of 220–217 B.C., and it is quite

[32] *Agrinion Hoard*, pp. 22–28.

[33] E.g., Pausanias and Imhoof-Blumer and Gardner, op. cit., note 8.

[34] IE and trident: F. Imhoof-Blumer, *Monnaies grecques* (Amsterdam, 1883), p. 123, no. 64; pl. D, 9 = H. Gaebler, *Die antiken Münzen Nord-griechenlands* III, 2 (Berlin, 1935), p. 187, no. 4; pl. XXXIII, 25. Trident and Ⱥ: Glasgow (*Hunterian* I, p. 340, no. 2), not illustrated (PLATE XX, 1). Gaebler, *Antiken Münzen*, p. 216, no. 85, considers a further number of examples with the latter markings (among them, de Luynes 1696 and Weber 2190) as modern forgeries, imitations of the Hunter piece. To his citations may be added Münz. u. Med. Nov. 17, 1962, 443.

[35] I. Merker, "The Silver Coinage of Antigonus Gonatas and Antigonus Doson," *ANSMN* 9 (1960), pp. 49–50. This article is reproduced at the end of the recent reprint of W. W. Tarn's *Antigonos Gonatas* (Chicago, 1969).

[36] *BMC*, pl. XIV, 10 and 11.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

possible that issues 64–6, also with trident symbol, appeared a few years earlier—struck, precisely as Merker has suggested for his two tetradrachms, under Antigonus Doson during the final phase of the Cleomenic War.

Issues 64–6 are represented in the Patras Hoard and also in the Greece(?) 1924 Hoard, of uncertain origin and date. The trident and ΘΕ of issue 65 are found on issues 58–61; and the four known specimens of issues 64–6 all have relative axis positions of ↑.

Issue 63 occurred in the Patras Hoard, and a coin of similar style, with Dioscuri and ΙΣ, in the Mektepini Hoard (no. 713). Thirty-three specimens of issue 63 were reported in the Patras Hoard, and this large number alone would surely suggest a Peloponnesian origin. Noe however suggests, and I agree, that the number was only 3, raised to 33 by dittography; his search for specimens turned up only three (by comparison, for issues 58–60 his figures are respectively 9 specimens located out of 9 or 10 in the hoard; 12 out of 21; and 17 out of 22). The three relative axis positions I have found for these dioscuri issues are all ↑. Their obverses do not at all resemble those of issues 58–61, but the close similarity between the reverses of *ANSNS* 6, 63.1 and, for example, 60.3 and 60.4, suggests that the Dioscuri issues may well be associated with 58–61, and also be strikings of Corinth (see PLATE XVII, 4 and 5).

Issues 68–70 occur in the Megalopolis and Patras Hoards, as well as Gordion Hoard V, buried some time after 208/7.[37] The two obverse styles, linked by a common reverse die, vary considerably from one another and from other late coins here considered. While the letters ΦΙ occur on late Argive issues, they are common ones, and in any case precedence must be given to the symbol, which at this period almost invariably has a civic significance. A possible candidate is Megalopolis, where a fulmen was used on League triobols, but the winged form of the fulmen on our coins is not that of the smaller ones. Such a winged fulmen is found on an occasional Elean coin of the period as well as on Spartan bronze,[38] but these two cities,

[37] The coin, Gordion, no. 17 (dies of *ANSNS* 6, 67.4) is worn and only the fulmen could be seen, and that not too clearly (the wings are not mentioned). The coin is ascribed to the second half of the third century, but to the Lycian-Pamphylian-Pisidian district.

[38] Elis: *BMC*, pl. XV, 10; Sparta: *BMC*, pl. XXIV, 3.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

separated geographically and politically from those which struck the other late Peloponnesian Alexanders here considered, are most unlikely candidates. The mint of issues 67–70 thus remains obscure, but the issues were small ones, with only two obverse dies known.

To these four late mints (Sicyon, Argos, Megalopolis, and Corinth) must be added at least one, and possibly three.

ΜΕΣ and tripod are frequently found on autonomous strikings of Messene, and this city without question must have struck the three known tetradrachms, all from the same obverse die, bearing these markings in the left field:

1. ΞΕ over ΔΑ below throne.

A1 – P1 Paris (Baiyada Hd.), ↑ 16.74. Title to right; name to left. (PLATE XX, 2)

2. Ι over ΔΑ below throne.

A1 – P2 Florence, Museo Archeologico; ANS, ↑ 15.44 (broken). No title; name to right. (PLATE XX, 3)

Their chronology will be considered below.

Hermione in the Argolid must be considered as a possible mint for a coin in the Patras Hoard marked with a wreath of corn ears, and ΗΡ below the throne (PLATE XVIII, 3). The overwhelming majority of Alexanders from this hoard are Peloponnesian, and it is here that one should first look for the mints of its uncertain issues. The corn-wreath symbol, which at this period should have civic significance, may well refer to Hermione, whose coinage repeatedly used a similar wreath as type.[39] (The ΗΡ monogram, however, is not

[39] It may be objected in opposition to this ascription to Hermione that no silver coinage is known for the city after the fourth century, and this objection is a serious one. To the fourth century belong the charming triobols with head of the young Demeter and reverse monogram ΨΕ in wreath of corn (e.g., *SNG Cop.* 136), and obols of fine style with reverse markings ΕΡ and ΔΙ (*JIAN* 1907, p. 31, pl. II, 40). Hermione apparently struck no Achaean League silver (*Agrinion Hoard*, pp. 68–9). But there exists at least one issue of the types of the fourth-century triobols, of execrable style, with reverse markings ΨΕ and ΔΙ (e.g., *SNG Cop.* 137). The two relative die positions I have been able to discover for this issue are ↑ as opposed to the random axes of the fourth-century coins. Although as yet undated, this issue appears to be a late one, and supports in some degree our attribution of the Alexander issue to Hermione in the late third century.

The possibility is mentioned in the text that this Alexander of Hermione may have been struck at Argos; this of course if true would make the preceding objection irrelevant.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

an abbreviation of the city's name, invariably spelled with an initial epsilon).

Attribution to Hermione is further strengthened by the coin's striking resemblance to Noe's Argive B-4 and B-5, especially the former, which is also a Patras Hoard piece (PLATE XVIII, 2). The obverse does not on close examination appear to be a recutting of the Argive obverse, although the facial similarity is so close that at first sight this seems a possibility. The reverse similarities are also remarkable: the throne has no cross-bar; the rear wing of the eagle is visible; a point of Zeus' robe falls between his legs and the throne.

It is indeed tempting to consider that the issue may actually have been struck at Argos. Hermione, a dependency of that dominant neighbor since Homeric times; (*Iliad* 2.560), joined the Achaean League in 229, the same year as Argos.[40] Hermione had no operating

The tetradrachm's beveled edge might also be adduced as indicating an eastern rather than a Peloponnesian origin, for this edge is chiefly an Asiatic phenomenon. But such an edge is found on Noe's Argive F-13, some early Athenian New Style tetradrachms (e.g., M. Thompson, *The New Style Silver Coinage of Athens* [New York, 1961], pl. 3, 25a, pl. 4, 28b), and, most significantly, on several Corinthian and Argive coins of the issues found in the Patras Hoard (e.g., Corinth: *ANSNS* 6, 58.2 and 60.5, the coins illustrated; Argos: *ANSMN* 10, B-5, the edge unmistakable on the coin although not too clear on the plate).

[40] Whether before or after Argos is uncertain. Polybius (2.44.6) states in general terms that some time after Lydiadas of Megalopolis laid down his tyranny and joined his city to the League, the same was done by the tyrants of Argos, Hermione, and Phlius. Strabo (8.7.3) mentions Argos, Hermione, Phlius, and Megalopolis—in that order. But Plutarch (*Aratus* 34) appears to put Hermione's entry well before that of Argos, and it is of course quite possible that Polybius' order reflects the importance of the cities rather than the chronology of the events. Apparently following Plutarch are E. A. Freeman, *A History of Federal Government in Greece and Italy* (London and New York, 1893), p. 331 and B. V. Head, *Historia Numorum*, 2nd. ed. (Oxford, 1911), p. 418. More recent opinion seems to be that Plutarch's order is not strictly chronological and that, as one would expect, Hermione followed Argos, her dominant neighbor, into the League (W. W. Tarn, *CAH*, VIII, p. 750; F. W. Walbank, *Aratos of Sicyon* [Cambridge, 1933], pp. 71 and 187, and *A Historical Commentary on Polybius*, vol. I [Oxford, 1957], p. 239). Argos' entry had been delayed somewhat by the maneuvering of Aratus, who wanted this important event credited to the period of his coming generalship. It is thus possible that even if Hermione joined somewhat earlier she did so in the knowledge that Argos would soon enter. It is difficult to separate the two events.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

mint of her own at the time; and common mints for the second-century Achaean League triobols now seem a definite possibility.[41]

A possible issue of Pellene is represented by an apparently unique coin in the Berlin cabinet, bearing chelys as symbol and ΠΕ below the throne (PLATE XX, 4). Precisely these markings are used on Pellene's only known issue of League triobols, and this no doubt lay behind A. von Prokesch-Osten's ascription of this coin to Pellene more than a century ago.[42] The easternmost of the Achaean cities, Pellene was a close neighbor of Sicyon, and the influence of this nearby leading League member may help to explain why Pellene alone in Achaea seems to have issued Alexanders.

When were these late, civic, issues struck? We have already seen that the dates of the minting cities' admissions to the Achaean League need no longer be considered as *termini ante quem*; indeed, it is a question whether they should not be considered as *termini post quem*. In any case, the removal of the bulk of the League triobols to the second century leaves a vacuum in the late third. Let us turn to the hoard record (see chart p. 91).

None of the issues here considered occur in the Olympia Hoard of ca. 250–225. While Elis was isolated geographically and politically at this time from the larger part of the Peloponnese controlled by the League, still this hoard contained a great deal of imported coin, and one might reasonably expect to find in it examples of the civic tetradrachms, had they been struck prior to its interment. This interment date unfortunately is less precise than one could wish.

The late tetradrachms first appear in the Megalopolis Hoard, whose burial is surely rightly dated to the time of the capture and razing of the city by Cleomenes, in the autumn of the year before the battle of Sellasia. The absolute date is uncertain, being dependent on the disputed date of the battle. Robinson opts for 222 for the hoard's burial; I, following the date (hesitantly) given in the *CAH*, will call it 223.

[41] *Agrinion Hoard*, pp. 100–3.

[42] The triobols: *Agrinion Hoard*, p. 58. The tetradrachm: A. von Prokesch-Osten, "Liste des Alexandres de ma collection qui ne se trouvent pas dans le Catalogue de Mr. L. Müller," *NZ* 1869, p. 48, no. 227.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Three of Noe's four Megalopolitan dies occur in this hoard,[43] confirming the obvious assumption that Megalopolis' issues ceased on its destruction in 223. Polybius (5.93.2–3) in a neat phrase notes the poverty-struck condition of the Megalopolitans after their city's razing: πολλῶν μὲν ἐπιδεῖσθαι πάντων δὲ σπανίζειν.

It would appear indeed that no League city struck coin from 222–220: Polybius (4.7.7), speaking of the year 220, just after the Aetolian pillage of Patras and Messene which touched off the Social War, says that the Peloponnesians ever since Cleomenes' fall, worn out by war and trusting to the permanence of their present tranquillity, had paid no attention at all to preparations for war. Plutarch (*Aratus* 47) also speaks of the Achaeans' negligence at this time, just after Antigonus Doson's death: they had become accustomed to be protected by other men's valor, and to be defended by Macedonian arms, and at this time lived at ease and without discipline. The implication of course is that there had been preparations for war, doubtless including minting, up until Sellasia—and there would be soon again.

All the Megalopolitan, and the earliest Sicyonian, Alexanders would then seem to have been struck for the war against Cleomenes, and it seems inevitable that we relate the coins' types to Macedonian participation in that war: Plutarch indeed specifically states (*Aratus* 45) that the Achaeans were compelled both to feed and to pay the Macedonian troops. Sicyon and Megalopolis were Cleomenes' two chief opponents and these are the two cities represented in the Megalopolis Hoard. Issues of Argos and Corinth, both of whom went

[43] A fifth is known (PLATE XX, 5), but is used for an issue which occurred in the Megalopolis Hoard.

Noe's D-9 (Megalopolis Hoard 9), the only example known to him from his fourth obverse die, was not illustrated in *ANSMN* 10 because of the coin's extremely poor condition. A better example from dies D-9 is here shown on PLATE XX, 6. It is from the collection of S. Nahas in Beirut; Dr. Seyrig has sent a cast to the ANS.

Die D should probably be placed next to die A in Noe's arrangement. The new example of D shows that it is close in style to A (n.b.: Noe's plate transposes the obverses of A-1 and C-8); only on reverses A-2 and D-9 is found ΜΕ rather than Μ; and the control letters on the reverse of A-2 clearly seem to the present writer to be not ΛΥΣ but ΤΕ, the letters found on D-9. Noe's description of the letters as ΛΥΣ probably followed that of the publication cited in note 42, where the tetradrachm A-2 is no. 228.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

over to Cleomenes in 225, although they shortly rejoined the League, are not present.

Argos and Corinth first appear in the Patras and Corinth Hoards of slightly later date. The Corinth Hoard was interred ca. 215 or possibly a little earlier. The Patras Hoard has previously been loosely dated to the late third century, but it was probably interred during the Social War, quite possibly during the latter half of 218 (see the commentary on pp. 86–88).

Inconclusive as this war's outcome may have been, it was a considerable conflict, involving in the Peloponnese not only the Achaean League but the young Philip V. Polybius (5.1.11–12) notes that in the spring of 218 the League voted to give Philip immediately fifty talents (three months' pay for his troops) and 10,000 medimni of corn; and thenceforward, so long as he was fighting with them, to pay him seventeen talents a month. In the summer of the same year he finds it worthy of mention (5.2.11) that Philip issued rations and paid his troops at Corinth before setting out with his army for Patras (see commentary on the Patras Hoard). One receives the impression that the army was paid irregularly and infrequently.

These Achaean payments to Philip's army during the Social War were surely the occasion for the minting of the next group of late Alexanders, those first occurring in the Patras and Corinth Hoards. These two hoards are also the earliest which contain the Aetolian pseudo-Alexanders, with Heracles' head and seated Aetolia, which Noe reasonably attributes to the time of the Social War.[44]

Fourteen of the Alexanders from the Patras Hoard have been identified in Athens and are illustrated on PLATES XVII and XVIII. All are in excellent condition, even the two Argive coins which Newton described as worn. Another consideration also suggests that the Corinthian issues 58–60 at least were freshly minted when this hoard was buried, namely, their great numbers (9 or 10 examples of issue 58; 21 of 59; and 22 of 60). Noe located 35 specimens of these three issues, most of which are very likely from the 51 or 52 specimens in

[44] *ANSMN* 10, p. 37 (the dates of the Social War are wrongly given as 217–5). One Aetolian tetradrachm was also present in the Sophikon Hoard of ca. 220, but there is no reason why this date (not of a burial but apparently of a shipwreck, as the coins were found in the sea), may not be slightly later.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the hoard, as the number of specimens reported in the Patras Hoard for a given issue are roughly parallelled by the number of examples Noe was able to locate.[45] The casts of these pieces at the ANS are all in fine or excellent condition, suggesting again a common origin in this hoard. And all 35 examples are from but four obverse dies, one of which (A96, used for issues 59 and 60) is represented by no fewer than 23 coins, by far the largest number per die in all of *ANSNS* 6. Such a large group of coins, in excellent condition and from so few dies, must have been very recently minted at the time of the hoard's burial.

To this general period must also be assigned the possible striking of Hermione discussed above. It must be contemporary with the Argive issues found with it in the Patras Hoard. The slight but unmistakable trace of a beveled edge on the Pellene coin suggests that this issue too may belong to the period of the Social War, for this edge is first found in the Peloponnese on several of the Alexander issues appearing in the Patras Hoard of ca. 218 (see note 39). Plundered by Aetolians in 241, and attacked again, although apparently unsuccessfully, in 220 (Polybius 4.13.5), Pellene would have had good reason to contribute to the Achaean side during this war.

These late Peloponnesian Alexanders, then, whose issuers included all of the Achaean League's leading cities, and which were apparently struck for the needs of the Cleomenic and Social Wars, may well be considered an early form of Achaean League money. They seem to have been struck sporadically for common military needs precisely as, according to Miss Thompson, were the later League triobols.[46] The tetradrachms thus attest a third-century League solidarity which precedes that shown by the triobols in the second century. The tetradrachms foreshadow Polybius' famous dictum (2.37.10–11) that in his time the Achaeans used the same laws, weights, measures, and coinage; and the same magistrates, senators, and judges—and that, all in all, the Peloponnese only failed of being a single city in that all its inhabitants did not live within the same walls.

[45] With the apparent exception of *ANSNS* 6, issue 63. See above, p. 55.
[46] *Agrinion Hoard*, pp. 85f. and 116–7.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

But were the tetradrachms, as has so often been claimed when their chronology was believed to be earlier,[47] struck with these types specifically in recognition of Macedonian support, or—more bluntly—in order to pay for that support? The types certainly must have been eminently satisfactory to Antigonus' and Philip's troops. The question hinges on whether the tetradrachms started only upon Antigonus' entrance into the war early in 224. The League had declared war in 228, and by the time Antigonus joined it, the League had virtually fallen apart: Cleomenes held all Arcadia but Megalopolis and Stymphalus; Achaean Pellene; Phlius; Argos; Hermione; Troezen; Epidaurus; and Corinth (although not Acrocorinth). In 224 the Achaeans made their momentous cession of Acrocorinth to Antigonus, and Argos was retaken. Megalopolis was destroyed in the autumn of 223, and Cleomenes finally defeated in summer 222 at Sellasia (these last two events may possibly have occurred one year later, as mentioned above). If the civic tetradrachms were struck with Mecedonian types because of the Macedonian alliance, those of Megalopolis then must have been struck within the space of one and a half or at the most two and a half years. This seems a very heavy output, for even the small amount of material extant uses five obverse dies. And the Sicyonian war issues have predecessors which cannot be placed in this small span: *ANSNS* 6, issue 44, with its excellent obverse style and small flan, can hardly be assigned to the same year as the ΔΡ issues. Also there are many Peloponnesian issues of uncertain origin which were struck between the cessation of overt Macedonian influence in 280 and its resumption in 224, showing that Alexander's types had not died out in the Peloponnese.[48] These late tetradrachms then resumed convenient types which were still, if infrequently, being struck locally—types which were, under the new Macedonian domination, extremely apt.

The next recorded hoard appearances of Peloponnesian tetradrachms are, without exception, in Asia Minor. An example of *ANSNS*

[47] *ANSNS* 6, pp. 37–8; *ANSMN* 10, pp. 38 and 40; T. Hackens, "A propos de la circulation monétaire dans le Péloponnèse au IIIe s. av. J.-C.," *Antidorum W. Peremans, Studia Hellenistica* 16 (Louvain, 1968), p. 91.

[48] Our Peloponnesian Hoard issues and associated strikings may, though, have been struck by the Macedonian-supported tyrants of Argos and Megalopolis. This is the tentative ascription suggested in this article.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

6, issue 67, quite worn, occurred in Gordion Hoard V, buried some time after 208/7, but as its die-linked issue 69 was in the Megalopolis Hoard, this is of little moment.[49] But issue 56, from the last of the indubitably Sicyonian dies; the Argive harpa-⅄ and wolf-⅄ coins from three of Noe's last four dies;[50] and the Messene issue are first and only found in Asia, and in hoards whose earliest burial dates are 190–188, or shortly after Magnesia: Mektepini and Central Asia Minor, ca. 190–188; Baiyada, ca. 186 or later; and Latakia, ca. 160. (see hoard commentaries and hoard chart, p. 91).

Tony Hackens has recently remarked on this fact as curious, but not necessarily proving that the Argive ⅄ coins were issued later than those found in the earlier Peloponnesian hoards.[51] He may well be right, but for the moment let us assume that our evidence, inadequate as it is, is not misleading, and that the ⅄ coins are later than other Argive issues.

How much later? The never-ending conflicts between the Achaean League and Sparta offer a raison-d'être for the coinage good at almost any time in the last decades of the third century. Philip came again to the Achaeans' aid at least twice during the last decade (Livy 27. 29–33; 28.7), a circumstance which parallels the conditions suggested above for the issuance of the preceding late Peloponnesian Alexanders.

Another possible time of emission is the period before Rome's defeat of Philip at Cynoscephalae in 197. An Achaean congress in 198 had voted to support Rome in the coming struggle, but before the vote was taken the representatives from Dyme and Megalopolis and some of those from Argos walked out. Shortly thereafter Argos delivered itself into Philip's hands. Before the final battle at Cynoscephalae, however, Philip turned the city over to Nabis. No doubt Philip recognized that he could not possibly continue to hold the city, but such treatment does seem rather shabby: Nabis proceeded to loot and strip Argos, and it was only set free in 195 by a combined force of Achaeans and Romans. It is possible that Argos in 198–197 struck her tetradrachms in aid of Philip, just as various League cities

[49] See note 37.

[50] Another Argive die of the harpa-⅄ issue, unknown to Noe, is illustrated on PLATE XX, 7. The ⅄ of this issue is sometimes ⅄, as on this piece, or ⅄, as on Mektepini 708–9 (but never ⅄ as described by Noe).

[51] Hackens, *Antidorum W. Peremans*, p. 91.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

had struck in support of his operations in the Peloponnese two decades earlier. The coins' exclusively Asian provenances are explicable against this background.

To turn to Messene: when might this city, long a holdout and finally a forced and unwilling member of the Achaean League, have issued her Alexanders? She was briefly friendly to, or more accurately in need of, the Achaeans in 220 when, her territory ravaged by Aetolia, she called on the Achaeans for help and apparently joined the Hellenic League (Antigonus Doson's League of Leagues, instituted just before Sellasia, which included the Achaean League). In 215, after arbitrating a class war at Messene, Philip occupied Ithome, whence he was driven by Aratus' vehement reproaches. In 214 Philip again attempted Ithome, failed, ravaged Messenian lands, and Messene quit the Hellenic League. The years 220–214 are thus one possible time for Messene's issue.

Another is the period immediately following Messene's forced entry in 191 into the Achaean League, when Messene's status as an actual member would parallel the circumstances suggested for the other cities here discussed. Though a reluctant member, Messene produced her share of League triobols, so that resentment of League membership does not argue against her producing these tetradrachms as League money.

A date this late means a different ally, Rome, and I should like, with some hesitation, to submit the possibility that Sicyon, Argos, and Messene struck Alexanders ca. 190 in connection with Rome's final defeat of Antiochus III. Messene's leanings toward Rome are well known; Argos may have had a change of heart after 195, or she may have been acting as a central mint for the League.

First, Achaeans were present at Magnesia, fighting on the Pergamene wing. Polybius (21.3b) records that the Achaeans in 191–190 concluded an alliance with Eumenes, and sent soldiers, 1000 foot and 100 horse, under Diophanes of Megalopolis; and Livy (37.20–21) states that this force, of experienced and effective troops, raised the Seleucid siege of Pergamum. He further states (37.39.9) that at Magnesia the Achaean light infantry was stationed with Eumenes' auxiliaries, the sum of the two being about 3000 men. Although this last citation gives neither the number of Achaean soldiers nor the

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

name of their commander, there can be little doubt that it was the same body of troops.[52]

Secondly, the article by Fred S. Kleiner in the present volume of *ANSMN* shows that hitherto undated Rhodian and Pergamene Alexanders should be placed at the time of the alliance with Rome, 201–188. If these cities were striking Alexanders in aid of Rome, our coins' types would be wholly appropriate. Further, if our coins were struck in the late 190's they were probably contemporary with the earliest Achaean League triobols—and this too finds a parallel in the output of Rhodes and Pergamum, for both cities were striking autonomous and Alexander types simultaneously. It may be noted, too, that in all four of the Asian hoards cited above, our late Peloponnesian Alexanders are found with those of Pergamum and Rhodes.

Finally, the markings on the Messenian and Argive tetradrachms are in most cases identical with those of the early second-century League triobols. Messene's tetradrachms bear ΞE, I, and ΔA. On the triobols attributed to ca. 195–188 and ca. 175–168 ΞE occurs, and on the latter group also the control combinations ΠΛ, ΠΔ, ΠA, and AΠ, of which our ΔA is likely a variant rather than a single magistrate's mark.[53] The late Argive tetradrachms bear harpa and wolf protome as symbols, and ⋀ and KTH.[54] On Argive triobols assigned to ca. 195–188 occur wolf's head, ⊼ (both reasonable "abbreviations," suitable for the smaller coins, of the wolf protome and KTH of the tetradrachms) and perhaps ⋀; on triobols struck ca. 175–168 are found harpa, ⋀, and ⊼.[55]

[52] This Achaean force in Asia is strangely ignored. The *CAH* (VIII, p. 220) states rather vaguely if not inaccurately that Eumenes relieved Pergamum with "auxiliaries recalled . . . from Achaea;" it is silent on Achaean participation at Magnesia. Even Freeman, although admittedly interested chiefly in constitutional history, mentions the group only once, in discussing Diophanes' character, and cites Livy only in connection with Pergamum (*Federal Gov. in Greece and Italy*, p. 488).

[53] *Agrinion Hoard*, pp. 31–4 and 116–7.

[54] I include the single known coin of the harpa-KTH issue in this discussion with some hesitation. Dr. Seyrig thinks that on grounds of style it may possibly be later than 190, and he is not sure it is even Argive.

[55] *Agrinion Hoard*, pp. 28–9, 68, and 116–7. Striking as these correspondences are, they do not provide an exact chronology for the tetradrachms. On the tribols the ⋀ monogram is used 195–188 and 175–168; the ⊼ monogram from 195–188 to ca. 160–150. The wolf is found ca. 195–188, the harpa ca. 175–168;

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Present evidence does not allow us to date these latest Peloponnesian Alexanders with absolute certainty. In favor of a late third-century date is the fact that no significant difference in wear can be detected in the Asian hoard coins between these last issues and those known to be prior to ca. 217.[56] Further, the only stylistic break in the Argive series is between the harpa-⅄ and the wolf issues, not between the harpa-⅄ issue and preceding ones.

Nevertheless, the combined evidence for a second-century date for these last issues is substantial. The absence from earlier hoards; the exclusively Asian provenances; the analogy with the Rhodian and Pergamene Alexanders; and the similarity of the tetradrachms' markings to those of the second-century Achaean League triobols—all these suggest that these latest Alexander issues of Argos, Sicyon, and Messene were an Achaean contribution to the final defeat of Antiochus III.

THE PELOPONNESIAN HOARD

With the historical context of other Peloponnesian Alexanders somewhat more firmly fixed, the hoard discussed in the opening paragraph of this article may now be examined. A catalogue of the hoard is given first, followed by a catalogue of the hoard coins together with all specimens known to me which can be associated with them. Commentary on individual issues follows, succeeded by a general commentary on possible attribution and dating, both of which remain extremely tentative.

The hoard coins are thus listed twice, and most are illustrated twice as well. All are shown together on PLATES IX and X, and many are again pictured on PLATES XI–XV together with associated strikings.

---

and the harpa-⅄ triobol issue is placed 175–168, or fifteen to twenty years later than the tetradrachm issue of the same markings, firmly dated before 190–188 by the Mektepini and Ayaz In Hoards. Most of the Messenian correspondences are also with triobols dated ca. 175–168.

[56] E.g., cf. Mektepini 707 and 708.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The Hoard Coins

All are tetradrachms bearing Alexander's types. Unless otherwise indicated, ΒΑΣΙΛΕΩΣ is in the exergue and ΑΛΕΞΑΝΔΡΟΥ to the right.

Sparta: *Areus*

1. ↘ 16.74. *Rev.* ΒΑΣΙΛΕ$^{\Omega}_{\Lambda}$Σ (*sic*) to the right; ΑΡΕΟΣ to the left; below throne, 𐤕 (Plate IX, 1; XI, A3–P2).

Uncertain Peloponnesian Mints

2. ↘ 16.85. *Rev.* to l., fulmen; below throne, ΠΥ (Plate IX, 2; XIII, A10–P17).
3. ↙ 16.72. *Rev.* to l., earring; below throne, ΠΥ (Plate IX, 3).
4. ← 16.68. *Rev.* to l., 𐤐 in wreath (Plate IX, 4; XIV, A14–P25).
5. ↘ 16.88. *Rev.* to l., crested helmet r. (Plate X, 5; XV, A16–P29).
6. → 15.47 (broken). Dies of no. 5, but the symbol has been recut. (Plate X, 6).
7. ↗ 16.84. *Rev.* to l., seven-pointed star. Nikes on throne back. (Plate X, 7).
8. ↘ 16.69. Obverse die of no. 7. *Rev.* to l., hanging wreath (Plate X, 8; XV, A17–P33).
9. ↙ 16.99. *Rev.* to l., Corinthian helmet l. No title. (Plate X, 9).

The Hoard Coins and Associated Strikings

All are tetradrachms bearing Alexander's types. Areus' coins have his title to the right and his name to the left. Unless otherwise indicated, the remainder have Alexander's name to the right and his title in the exergue. An asterisk identifies the specific example illustrated of each die combination.

Sparta: *Areus*

1. 𐤄 below throne.
   A1 – P1 *Paris, ↗ 16.66.
2. 𐤕 below throne.
   A2 – P2 *Berlin = C. T. Seltman, *Greek Coins*, 2nd. ed. (London, 1955), p. 256, pl. LXII, 6 = J. Friedlaender, "Die Erwerbungen des Königlichen Münzkabinets im Jahre 1874," *ZfN* 1875, p. 285, pl. IX (line drawing), ↖ 16.59.
   A3 – P2 *ANS (Pelop. Hd. 1), ↘ 16.74.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Uncertain Peloponnesian Group I

1. Athena Promachus to left; F below throne.
   A4 – P3 *ANS (Olympia Hd. 72) = *ANSNS* 6, 42.1, ↓ 16.76. Nikes on throne back. No title.
2. Athena Promachus to left.
   A5 – P4 *Leningrad, Hermitage = *ANSNS* 6, 41.1. Nikes on throne back. No title.
   A5 – P5 *Berlin = *ANSNS* 6, 41.2a; ANS (Olympia Hd. 68) = *ANSNS* 6, 41.2b, ↗ 16.76. Nikes on throne back. No title.
3. Athena Promachus to left; EY below throne.
   A6 – P6 *ANS = *ANSNS* 6, 40.1, ↘ 16.87. Nikes on throne back. No title.
   A6 – P7 *Athens (Epidaurus Hd. 17) = *ANSNS* 6, 40.2a, ↑ 16.83; Athens (Epidaurus Hd. 18), ↓ 16.89; London = *ANSNS* 6, 40.2b, ↘ 17.03; Munich = *ANSNS* 6, 40.2c, 17.70. Nikes on throne back. No title.
   A6 – P8 London = *ANSNS* 6, 40.3a; *Munich = *ANSNS* 6, 40.3b, 16.78; Copenhagen (*SNG* 735) = *ANSNS* 6, 40.3c, → 16.78. Nikes on throne back. No title.
   A6 – P8a Münzen und Medaillen, Mar. 8, 1971, 61. Nikes on throne back. No title.
   A7 – P9 *Berlin = *ANSNS* 6, 40.5. Nikes on throne back. No title.
   A8 – P10 *ANS (Olympia Hd. 69) = *ANSNS* 6, 40.6, ↘ 16.82. Nikes on throne back. No title.
4. Bee to left; ΠY below throne.
   A8 – P11 *ANS (Olympia Hd. 70) = *ANSNS* 6, pl. XIII, A, ↗ 16.76.
5. Biga to left.
   A8 – P12 *Cast at ANS, provenance unknown. Exergue not preserved.
6. Biga over A to left; Ξ below throne.
   A8 – P13 *ANS (Olympia Hd. 71) = *ANSNS* 6, pl. XIII, B, ↗ 16.75. No title.
   A8 – P14 *ANS, ↗ 15.92. No title.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

7. Fulmen to left; ΠΥ below throne.
   A9 – P15 *London, ↑ 16.81. Nikes on throne back.
   A10 – P16 *Hague. ΠΥ omitted.
   A10 – P17 *ANS (Pelop. Hd. 2), ↘ 16.85.
   A10 – P18 *ANS (Olympia Hd. 75), ↖ 16.62.
   A10 – P19 *Berlin.
8. Earring to left; ΠΥ below throne.
   A11 – P20 *Glasgow (*Hunterian* I, p. 304, 80), 16.58; Athens (Corinth Hd. 152), 16.81.
   A11 – P21 *Paris, ← 16.00.
   A11 – P22 ANS (Pelop. Hd. 3), ↙ 16.72; *ANS, ↗ 15.85; ANS, ↖ 16.02.
9. Serpent on altar to left; ΠΥ below throne.
   A12 – P23 Megalopolis Hd. 17, 16.02; *ANS (ex Dr. Pozzi), ← 16.93; Vienna.
10. Wolf's head to left; ΠΥ below throne.
   A13 – P24 *Athens (Sparta Hd. 13), 15.97. Zeus' legs not crossed.

Uncertain Peloponnesian Group II

1. ΜΡ in wreath to left.
   A14 – P25 *ANS (Pelop. Hd. 4), ← 16.68.
   A14 – P26 *ANS (Olympia Hd. 74), → 16.78. Obverse recut.
   A15 – P27 *Cambridge, Fitzwilliam (*SNG* 2136), ↑ 16.79.
   A15 – P28 *Athens, Petsalis Coll.
2. Crested helmet to left.
   A16 – P29 *ANS (Pelop. Hd. 5), ↘ 16.88; ANS (Pelop. Hd. 6), → 15.47 (symbol recut).
   A16 – P30 *Berlin, ↗ 17.10.
3. Crested helmet and seven-pointed star to left.
   A16 – P31 *ANS, ↓ 16.41.
4. Seven-pointed star to left.
   A17 – P32 ANS (Pelop. Hd. 7), ↗ 16.84; *ANS (Olympia Hd. 73), → 17.07; Vienna, 16.50. Nikes on throne back.
5. Hanging wreath to left.
   A17 – P33 *ANS (Pelop. Hd. 8), ↘ 16.69.

Uncertain Peloponnesian Group III

1. Corinthian helmet to left.
   A18 – P34 ANS (Pelop. Hd. 9), ↙ 16.99. No title. (PLATE X, 9).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Commentary on Individual Issues

Sparta: *Areus*

The three coins listed are the only specimens known to me of this rare issue.[57] Although the three are from three different obverse dies, the Berlin and ANS coins share a common reverse. There is no way to estimate the original size of the issues, whose poor survival rate may be explained either as analogous to that of all the indeterminate Peloponnesian Alexanders or by the melting down of the king's money by his later "democratic" successors.

Coins of Nabis (207–192) bear the dialect inscription ΒΑΙΛΕΟΣ ΝΑΒΙΟΣ. Areus' name on his three coins is also in a local genitive form, ΑΡΕΟΣ, rather than the standard ΑΡΕΩΣ. The title on Areus' coins includes the internal Σ, but the penultimate letter, illegible on the Paris coin, is barely visible on the Berlin specimen. It has been uncertain whether the title ended in -ΕΟΣ or -ΕΩΣ: -ΕΟΣ has been generally accepted not because the omicron was legible but because this ending agreed with that of Areus' name on the coins.[58] Our coin's well-preserved letter explains this uncertainty: the title ends in -ΕΦΣ (sic). The engraver evidently first cut -ΕΟΣ, and then made a half-hearted attempt to change the omicron to an omega, without, however, making the corresponding change in the king's name. He must have realized rather belatedly that the spelling of the title on whatever model he was using was ΒΑΣΙΛΕΩΣ, and then tried to change his title to conform—but without an actual example before him of the normal Greek spelling of Areus' name in the genitive, it never occurred to him not to leave that in its usual dialect form. There has even been a doubt raised, because they do not bear Nabis' ΒΑΙΛΕΟΣ, as to whether Areus' coins were actually struck at Sparta;[59] our coin's confused spelling, however, is clearly that of a native.

Uncertain Peloponnesian Group I

The symbol on issue 8 has been previously described as a mirror and as a necklace. Müller considered it a mirror, and this identifi-

[57] B. V. Head, *HN*, p. 434, states that Areus struck drachms of the same Alexander types, but I have found no mention of these elsewhere.
[58] Friedlaender, *ZfN* 1875, p. 285.
[59] A. J. B. Wace, "A Hoard of Hellenistic Coins," *BSA Annual* 1907–8, p. 157, note 8.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

cation formed the basis of his ascription of the issue to Tricca (M. no. 538). MacDonald in the Hunter catalogue calls it a necklace. The former identification seems to me most unlikely, as to represent a mirror the symbol would have to be interpreted as an outline drawing rather than a relief, almost unprecedented. The necklace is more plausible, but another possibility is a simple earring such as is found on, for example, the Demareteion. The vertical lower portion of the symbol, more clearly visible on our coin than on previously-known examples, has a decided swelling just below the juncture with the circle. The shape is precisely that of a common type of Greek jewelry pendant, and the scale in relation to that of the circle above is not that of a necklace but of an earring.

The composition of Group I is rather arbitrary, comprising as it does all issues found in the Peloponnese bearing the letters ΠΥ (4, 7–10), issues die-linked with one of them (3, 5–6), and further issues (1–2) bearing the same symbol as one of the die-linked issues (3).

The portrayal of the Athena Promachus symbol on issue 1 is not like that of issues 2–3, and the coin's style is quite different (and quite execrable). The coin may well be an imitation of issues 2–3, either a later regular issue of the same mint, or an unofficial striking of another. It is included here for the sake of completeness, especially as it occurred in the Olympia Hoard along with examples of issues 2 and 3.

Issue 2 is so close in style to issue 3 that, were but one reverse known, it might well have been considered part of that issue, with the omission of the letters inadvertent. And issues 3–6 are firmly die-linked.

The ΠΥ issues 8–9 are extremely close in obverse and reverse style, in flan size and in the presence of the title; they must be nearly contemporary strikings of the same mint. They are related, however, to issues 7 and 10 by little else than the repetition of the letters ΠΥ, the presence of the title, and the joint occurrence of issues 7 and 8 in our Peloponnesian Hoard. One can well imagine that in midthird-century Greece there was many a man named Pyrrhus, for example, to consider only one of the possible expansions of ΠΥ. Nevertheless, it is probably reasonable to group all the ΠΥ issues together.

The crucial question is whether they should be grouped with the Athena Promachus issues on the basis of one reverse (P9) with the

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

letters ΠΥ, die-linked to those issues. The first example of the fulmen issue, however, forms a possible transition: its obverse A9 is of fairly good style, not comparable to but a reasonable successor of the finely-worked A6 of the Athena issues; and this coin with fulmen and ΠΥ also portrays the Nikes on the throne back, as do all the coins with the Athena Promachus symbol. The two issues occurred together in the Olympia Hoard. Further, the bee—ΠΥ reverse P11 resembles the other ΠΥ reverses (and no others in Group I) in including the title in the exergue. Thus again, although the evidence is suggestive rather than decisive, we may for the moment consider Group I a coherent group, the output of one mint. It is difficult, however, to reach any firm conclusions as to the relative order of the issues. The arrangement of the tabulation is not to be taken as necessarily chronological.

Uncertain Peloponnesian Group II

The four obverses used for these issues are alike in their vigorous modeling and in their emphasis on the horizontal bottom fold of the headdress. All the coins have moderate to large flans; all the reverses include ΒΑΣΙΛΕΩΣ in the exergue; and the title's spacing is often cramped at the end, with the letters running uphill, a trait common to issues 1, 3, 4, and 5.

Issues 2 and 3, and issues 4 and 5, are die-linked. Issues 3 and 4 are linked by the common symbol of the seven-pointed star; their order is clear from the progression of small die breaks (between the beaded border and the upper locks of the lion's hair) on obverse die A16. Issue 1 is here grouped with issues 2–5 by the characteristics mentioned above, by the issues' association in hoards (Olympia and Peloponnesian), and by the extremely close similarity of issue 1's reverses to those of issue 2. Recutting is also to be noted in both these issues.

Uncertain Peloponnesian Group III

This apparently unique coin[60] derives stylistically from *ANSNS* 6, issues 28–36, here reattributed to Corinth ca. 290–285. It differs

[60] An Alexander stater issue (Müller 190) is known with the same symbol (e.g., de Luynes 1607 and Naville V, 1388), but its attribution is quite uncertain.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

from them, however, in its generally weak style and flat relief, and its lack of both letters and title on the reverse. Nor can it be placed with any assurance in either of the other uncertain groups.

General Commentary and Chronology

Areus of Sparta's long reign extended from 309 to 265. We know nothing of his activities during the early part of this period. In 280, encouraged by Antigonus Gonatas' recent naval defeat at the hands of Ptolemy Keraunos, he led a Peloponnesian coalition against Antigonus, and marched north through the Peloponnese. His coalition included Elis, most of Arcadia, and parts of the Argolid and of Achaea. Argos and Megalopolis expelled their Macedonian garrisons, although they did not join Areus. This was the time of the general revolt against Antigonus, which included Athens, Boeotia, Megara, and several Achaean cities: by 279 Antigonus probably held only Demetrias, Corinth, Piraeus, and a few places in Achaea and the Argolid. Areus and his troops invaded Aetolia, Antigonus' ally; were promptly defeated; and returned home. When the Spartans wished to renew the offensive, the alliance fell apart.[61]

Areus is next heard of at the time of Pyrrhus' invasion of the Peloponnese in 272. The Spartan king, away in Crete with his mercenaries, returned in time to drive Pyrrhus off from besieging Sparta, in whose heroic resistance the sources revel. Pursuing Pyrrhus to Argos, Areus contributed to his final defeat and death in 272.

Again, during the Chremonidean War, in alliance with Ptolemy II's fleet, Areus attempted to relieve Athens, besieged by Antigonus. Argos and Megalopolis were now siding with Antigonus. Areus marched across the Peloponnese at the head of an allied force including Elis, Achaea, and eastern Arcadia, but was turned back in 266 at the isthmus. Returning the next year, he was defeated and killed by Antigonus at Corinth.

Areus' tetradrachms bearing his own name are most often guessed (no other word will do) to date from the campaign against Antigonus in 280. But they have also been put to 272, after Pyrrhus'

[61] Justin 24.1. The account of the allies follows Tarn, *Antigonos Gonatas*, pp. 132–3.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

defeat, and, more recently, to the years 306–4, following Areus' accession.[62]

Another element of uncertainly is introduced by the Spartan tetradrachms of autonomous types: diademed head of a king, and standing Apollo of Amyclae, inscription ΛΑ.[63] No hard evidence of any sort dates this issue, and it has been ascribed to both Areus and Cleomenes III. Noe has recently and plausibly assigned still another issue to Cleomenes during the 220's: that with the head of Athena (or of Apollo of Amyclae), and seated Heracles, inscription again ΛΑ.[64] The situation is far from clear.

The dating of these other Spartan issues is not our direct concern here. But if one could know with certainty that the tetradrachms portraying a king's head were indeed Areus', then one would probably be constrained to place his Alexander coinage earlier—this would be the order suggested by other rulers' succession of types—but the flans of the three known Alexanders are broader and thinner than those of the coins with the king's head, which is usually an indication of later date. If Areus struck the king's-head tetradrachms and if they are later than his Alexander coinage, the latter cannot date from the very end of his reign. But unless and until these points are established, it seems to the present writer that the whole of Areus' reign must be considered in attempting to date his Alexander tetradrachms.

One internal consideration seems to point to a date after 290 at the earliest: the placement of the inscription, with the name to left and title to right. It is not that of any of Alexander's immediate successors on their coins of these types, struck during the earlier part of Areus' reign. May Areus' placement not derive (Spartans whatever their virtues were not noted for innovation) from the placement of the name and title on Demetrius Poliorcetes' and Antigonus Gonatas' coins? Demetrius' coins with his own types were struck briefly with name to right and title to left, but in ca.

[62] 272: K. Beloch, *Griechische Geschichte*, IV, I (Berlin, 1925), p. 587. 306–304: A. R. Bellinger, *ANSNS* 11, pp. 89–90.
[63] *BMC*, pl. XXIV, 1.
[64] The issue was briefly and erroneously ascribed to Allaria in Crete: *BMC Crete and Aegean Islands*, pl. II, 1. Noe suggested that it was struck by Cleomenes in *ANSMN* 10, p. 33.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

291–290 were changed to show the placement found on Areus' coins,[65] and this is the arrangement generally found on Antigonus Gonatas' coins of his own types.

Mention may also be made here of a small issue of tetradrachms of Alexander's types but with the name of Antigonus. Previously ascribed to Antigonus I Monophthalmus, they were considered Macedonian issues of Antigonus Gonatas by Newell.[66] With this Merker agrees, adding that they must have been struck early in Gonatas' reign[67]—i.e., shortly after 276, when he acquired Macedon. I have located but five examples of this rare issue, all from the same obverse die.[68] One of the four reverse dies has title to left and name to right;

[65] *Demetrius Poliorcetes*, pp. 87–9, 106–7, and *passim*.

[66] *Demetrius Poliorcetes*, p. 14, note 1. See note 68 below.

[67] Merker, *ANSMN* 9, p. 39.

[68] Name to right (same reverse die): 1) Berlin. A. von Sallet, "Erwerbungen des Königlichen Münzcabinets in den Jahren 1890–1897," *ZfN* 1898, pl. IV, 2, 16.33; 2) ANS. *ANSMN* 13 (1967), pl. V, A, ↑ 15.53. Name to left (three different reverse dies): 1) London. C. T. Seltman, *Greek Coins*, 2nd ed. (London, 1955), pl. L, 11 = B. V. Head, *HN*, p. 229, fig. 140 = C. T. Seltman, "A Synopsis of the Coins of Antigonus I and Demetrius Poliorcetes," *NC* 1909, pl. XX, 6 = B. V. Head, *Coins of the Ancients*, 4th ed. (London, 1895), pl. 31, 12, 17.04; 2) Athens, ↘ 16.91 (PLATE XIX, 1); 3) Schlessinger 13 (Hermitage 1935), 758 = B. M. Yakountchikoff, *Rare and Unpublished Greek Coins* (St. Petersburg, 1908 [in Russian]), no. 27, 16.31.

Newell consideredthese coins Macedonian because of their style and fabric and because their ⋿ monogram occurs also on Antigonus Gonatas' coins of his own types and on Alexanders with Alexander's own name which Newell believed had been struck under Gonatas in Macedonia, probably at Pella. To this may be added that one of the Alexander series assigned in Newell's trays to Pella is now known to have employed the obverse die used for the coins listed above with Antigonus' name. Three coins of this series from this die are known to me, all with the same reverse markings, but from three different reverse dies: 1) ANS, ↖ 16.78 (PLATE XIX, 2); 2) London, ↗ 16.19; Sofia, 16.65.

Seltman's *NC* 1909, pl. XX, 1, an apparent earlier Alexander with Antigonus' name, is with more reason ascribed to Antigonus I by Seltman. But Newell, (*Demetrius Poliorcetes*, p. 14, note 1) condemned this coin (= Hirsch 21, 1908 [Weber], 1252 = Hirsch 13, 1905 [Rhousopoulos], 1157, 16.90) as a case of a modern reengraving of Antigonus' name over Alexander's. An unretouched coin from the same dies is here shown on PLATE XIX, 3. It too is from a series which Newell's trays indicate he considered struck at Pella, in the late fourth century.

Lee Avdoyan, a student in Miss Thompson's Columbia seminar of Spring 1971, has independently assessed Antigonus' Alexanders, concluding that the coin with Alexander's name (PLATE XIX, 2) was the last of a series issued in

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the other three have title to right and name to left, as on Areus' coins. It is tempting to speculate that this issue may have been struck in connection with Antigonus' operations in the Peloponnese during Areus' lifetime: the two were united against Pyrrhus, and opposed during the Chremonidean war. In any case, these coins provide a close parallel to, and possible model for, Areus' Alexander coinage.

In spite of the pitfalls involved in arguing from one coin, one is almost compelled to draw some conclusion, however tentative, from the one hoard provenance known for Areus' coins: our Peloponnesian Hoard. Since our hoard's coins do not differ markedly in style and since they exhibit the same degree of wear, one can assume that they are indeed roughly contemporary.

What of the dating of our hoard's eight Alexanders? Little definite can be said here, either. These uncertain Peloponnesian series are absent in all of the many hoards interred ca. 280, and Newell further remarks of his Olympia Hoard coins from our die A5 of Group I that "combined indications of style...point to well after 275 B.C."[69]

But how late may they be? A *terminus ante quem* is provided by the Olympia Hoard, but it is rather imprecise, for the closest this hoard's burial has been dated is 250–225. The present author tends to favor the earlier part of this period, as there is no numismatic reason for a date as late as the 220's or even the 230's (see hoard commentary). As the Peloponnesian Alexanders in the Olympia Hoard do show some wear, 260–255 may reasonably be taken as the lowest possible date for their striking.

The Athena Promachus issues present a complication. T. Hackens, in his recent illuminating study of third-century Peloponnesian hoards, has remarked the fairly fresh condition of the four pieces 68–71 (one each of Group I issues 2, 3, 4, 6), three die-linked, in the

---

Macedonia under Pyrrhus, and that those with Antigonus' name (PLATE XIX, 1) were the first struck by Antigonus on regaining Macedonia in 272. Unknown to Avdoyan, and to me until recently, this was also Newell's belief, as shown by manuscript notes at the ANS. As this dating places all the Alexanders with helmet symbol (e.g., *SNGCop.* 713–4) after 272, Avdoyan also lowers the start of Antigonus' Pan-head tetradrachms (which bear this symbol) from the usual date of 277 to 272. Therefore, if indeed Areus' coins with their unusual placement of the inscription reflect Antigonus' coinage, they can only date from the time of the Chremonidean War.

[69] *Alexander Hoards* IV. *Olympia*, *ANSNNM* 39 (New York, 1929), p. 20.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Olympia Hoard, and has suggested that they were minted not too long before the hoard's interment.[70] With this I agree, although, as stated above, I prefer a burial date for the hoard closer to 250 than to 225; Hackens favors the later time.[71]

Mention must be made, however, of the rather unsettling presence of two examples of the Athena Promachus-EY issue, in excellent condition, in the Epidaurus Hoard, whose burial is dated to ca. 280.[72] Hackens of course notes this but suggests that the hoard's date be reviewed and lowered to ca. 250–240. This seems drastic, but as these two coins were among the best-preserved in this hoard, and as this issue is absent from the many other large hoards interred ca. 280, probably the burial date should indeed be lowered. A drop of ten to fifteen years would bring it well within the period we are here considering.

At the outside, then, our coin of Areus may have been struck between 290 and 265; our uncertain Alexanders between 280 and 260–255. The fifteen years 280–265 are common to both, and these of course are precisely the years for which the tradition records military activities of Areus.

Where were these uncertain Alexanders struck? Sparta can most probably be ruled out, as none show the slightest resemblance in style or fabric to Areus' coins. Further, that Areus should use Macedonian types is startling enough, although the use he made of them

[70] *Antidorum W. Peremans*, pp. 75–6.

[71] Favoring Hackens' low dating, although he does not mention it, is Newton's report of an example, in excellent condition, of the Athena Promachus-EY issue in the Patras Hoard of ca. 218 (my dating). This coin is unfortunately not among those recently identified at Athens as belonging to this hoard. One piece in good condition, however, needs mean little; and Newton in at least one other case was somewhat mistaken in his assessment of wear (see p. 60).

[72] Noe's *ANSNS* 6, die A80, used with his 40.4 (Athena Promachus-EY issue), is that of Corinth Hd. 146, with markings of aphlaston and ΔO and of the coin here illustrated on PLATE XIX, 5, from the Armenak Hd. of 280. These links and apparent confirmation of the Athena Promachus issue's starting date as prior to 280 must be disregarded, as Noe's 40.4 is seemingly an error. It is taken from a plate (I, 20) of Svoronos' τὰ νομίσματα τοῦ κράτους τῶν Πτολεμαίων. The coin, there listed in trade, is untraceable. The obverse of 40.4, of a style totally foreign to all of *ANSNS* 6, is noticeably smaller than the accompanying reverse; and the suspicion that it was an intrusion was confirmed by the observation that 40.4's pictured reverse is clearly that of 40.3b (See PLATE XII, A6–P8).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

by naming them his own should no doubt be interpreted as a clear act of defiance. But that this city, of all Greek states the most resolutely anti-Macedonian, should strike Alexanders indistinguishable from those of its constant enemy is somehow psychologically inconceivable.

Two possible alternate explanations present themselves. One is that the coins were minted at Elis, ever Sparta's ally. Her own coinage was slight in this century, and its standard in any case ill-suited for military needs and mercenary pay. The few provenances of the issues in question point in this direction. Of Group I, 6 coins (3 die-linked) were found at Olympia, 2 in our Peloponnesian Hoard in company with Areus' coins, 1 at Sparta—and 2 at Epidaurus, and 1 each at Megalopolis, Corinth, and Patras. All the Group II coins with known provenances are from the Olympia Hoard and our Peloponnesian Hoard. The biga, which is a distinctive symbol, and the fulmen, which, however, is not, would be appropriate to Olympia, and ΠΥΡ and ΕΥ are found on her bronze.[73] The F of issue 1 is also most suggestive. But the psychological objections of the preceding paragraph would also apply to Elis, if to a lesser degree, and it further seems impossible to consider Groups I and II, which must be very close in time, as issues of a single mint.

The second possibility has most recently been suggested by Hackens, who proposes that the Athena Promachus coins may be strikings of Argos, "ville à laquelle le Palladium servait d'emblème assez souvent."[74] Newell, after dismissing associations of the symbol with Demetrius Poliorcetes or Pyrrhus, hinted at this, suggesting that the coins represent a civic issue of Sicyon or Argos.[75] The letters ΠΥ do appear on small Argive silver and bronze.[76] The Corinthian helmet symbol of our single coin of Group III also occurs on Argive strikings,[77] although the repetition of so banal a symbol may well mean nothing, and this coin is in style and fabric very unlike any of even our diverse Group I. The wolf-head of issue 10 would be most appropriate to Argos.

[73] *BMC* 116, *SNG Cop.* 433–4.
[74] *Antidorum W. Peremans*, p. 76.
[75] *ANSNNM* 39, p. 20.
[76] *BMC* 79–81, 86–7, 95.
[77] *BMC* 29–32, 70, 101–3. An example of 101 (bronze) was in the Chandrinos Hoard (see hoard list), dated to the first quarter of the third century.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

If then we tentatively consider Group I Argive, a mint for Group II immediately presents itself: Megalopolis. Here were the two great Macedonian-supported tyrannies in the Peloponnese, Antigonus Gonatas' much-maligned but economical and efficient system for maintaining at least a modicum of influence over an area he could no longer control directly.

Our scanty tradition appears to date Antigonus' establishment of tyrants to the years immediately following Pyrrhus' death in 272.[78] Tarn prefers however to date their effective power from after 265, the year of Areus' death.[79] Tarn's reasoning is that neither Argos nor Megalopolis stopped Areus on his marches across the Peloponnese in 266 and 265 (we have no record of whether or not they tried), while Aristodemus of Megalopolis alone was shortly thereafter able, in 263 or 262, to defeat and kill Areus' son and successor Acrotatus.

What more natural than that these tyrants, subsidized by Antigonus and doubtless employers of Macedonian mercenaries, should strike coinage of Macedonian types? Such an explanation for our uncertain Peloponnesian issues is satisfactory on many grounds. Two chief mints are found for the two groups of issues. We have seen above that Macedonian domination apparently explains the choice of types for virtually all other Peloponnesian Alexanders whether earlier or later, and such influence although indirect is present here also. The chronology of the issues falls precisely in our suggested range. And the hoard associations of the coins, Olympia and Sparta, are easily explained by Areus' expeditions.

Whether these Alexanders were struck before or after 265 is hard to say, but it is probably reasonable to place their commencement ca. 270, by which time Antigonus' subsidies must have begun. This would allow the Olympia Hoard coins to have travelled back to Olympia with Areus' defeated army.

Areus' coins can hardly have been struck for the struggle against Pyrrhus, as the Spartan king only returned home in time for Pyrrhus' final defeat. We are left then with the attack of the Peloponnesian coalition on Aetolia in 280 and Areus' participation in the Chremonidean War in 266 and 265. The later occasion seems preferable for

[78] Polybius 2.41.10, 9.29.6; Trogus *Prol.* 26; Justin 26.1.
[79] *Antigonos Gonatas*, pp. 280, 298, and 302.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

several reasons. It agrees more closely with the dating just proposed for the other coins in our hoard, although such close agreement is not really necessory. That Areus was the first Spartan king to aspire to a royal court and luxury is often mentioned, but what the source actually says is that Areus *and Acrotatus* did so: Ἀρεὺς καὶ Ἀκρότατος αὐλικὴν ἐξουσίαν ζηλώσαντες... (Athenaeus 4.142b). Does this not indicate that Areus' regal pretensions, and hence probably his regal coinage, came near the end of his reign?

Finally, there is the possibility that Ptolemy II subsidized Areus' coinage. Tarn believes that Egypt, ever wishing to harass and contain Antigonus indirectly, had financially backed Pyrrhus' Macedonian invasion of 273[80]—but by 272 Pyrrhus was dead. Athens and Sparta were next used, the Chremonidean War being essentially Egypt's war. Sparta had been Egypt's friend for some time: at some unknown date Ptolemy II had dedicated a statue of Areus at Olympia, and the Spartans, φίλοι καὶ σύμμαχοι τοῦ βασιλέως ὄντες Πτολεμαίου, of course campaigned during the war in conjunction with the Egyptian fleet.[81] It may well be that this isolated and exceptional silver issue of Sparta was due to her alliance with the world's richest power.

For present purposes the precise burial date of our hoard is not significant, but if the dating of the coins is correct, a burial date of ca. 250–240 B.C. would not be unreasonable.

Summary of Conclusions

1. There is no compelling reason to consider *ANSNS* 6, 1–16 Sicyonian or even Peloponnesian.
2. *ANSNS* 6, 17–36 were probably struck not at Sicyon but at Corinth during the time of Demetrius Poliorcetes.
3. Areus of Sparta's tetradrachms with Alexander's types appear to date from late in his reign, possibly 266–265, the time of his participation in the Chremonidean War.
4. Hitherto unattributed Peloponnesian Alexanders may be early issues, ca. 270–260, of the Macedonian-supported tyrants of Argos and Megalopolis.

[80] *Antigonos Gonatas*, pp. 263 and 445.
[81] The statue: *SIG*[3] 433; the phrase is Chremonides', from 267 B.C.: *SIG*[3] 434/5.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

5. Late Alexanders of Peloponnesian mints (Argos, Megalopolis, Sicyon, Messene, probably Corinth, and possibly Hermione and Pellene) with few exceptions were struck in connection with Macedonian participation in the Cleomenic and Social Wars, 224–222 and 220–217, respectively. A few of the latest issues may extend into the second century.

Hoards Cited

In general, information given in Noe's *Bibliography* is not repeated, with the exception of the principal publication.

Argos 1967

M. Oeconomides, *Arch. Delt.* 23 (1968), p. 12, B5. Two tetradrachms of Alexander III, probably part of a larger hoard: one *ANSNS* 6, issue 24; one Babylon, ca. 317 or later.

Armenak, Asia Minor 1927, ca. 280 B.C.

Noe 67. The large portion at the ANS includes 1 each of *ANSNS* 6, issues 24, 26, 28, and 35; 2 each of *ANSNS* 6, issues 29 and 30; 1 uncertain dolphin-NO (Plate XIX, 4), and 1 uncertain fulmen -ΔO (Plate XIX, 5). See note 72.

Asia Minor, Central, 1924, ca. 190–188 B.C.

Noe 79. Newell's hoard notebooks at the ANS describe the 16 Alexander tetradrachms in this hoard, among which is one Argive coin with harpa and A (the monogram broken off). Noe states that Newell acquired the hoard but this coin at least is not in the ANS trays. The latest dated coin is a single one of Perga (year 24). Rhodian Alexanders with monograms and names were also present in "fine" condition. The hoard's burial date would thus seem to be comparable to that of the Mektepini Hoard, or ca. 190–188.

Ayaz In (*Phrygia*), after 190 B.C.

A large hoard in Paris, including one Megalopolitan Alexander with markings of TI, syrinx, ME and API, from Noe's die C; Alexanders of Perga (year 29), Phaselis (year 26), and Aspendus (year 20); and several Rhodian and Pergamene Alexanders.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Although unpublished, the hoard has been mentioned and its burial date given as ca. 190 B.C. or later by H. Seyrig ("Monnaies hellénistiques VIII. Pergé," *RN* 1963, p. 42), and Dr. Seyrig has sent a catalogue of its contents to the ANS.

The "Pamphylian Era," by which the Alexanders of Perga, Phaselis, and Aspendus are dated, is central to the estimation of the burial date of this and several other hoards here cited. This era of thirty-three years was long thought to lie entirely within the second century. In the article just cited, Dr. Seyrig suggested that it ran from 221/0 to 189/8 B.C., ending with Magnesia. He has since told me, however, to disregard his dating and to await a forthcoming publication of Dr. Christof Boehringer, which takes advantage of a mounting body of hoard evidence. Dr. Boehringer has kindly shared with me his conclusions (from *Zur Chronologie mittelhellenistischer Münzserien*, vol. V of *Antike Münzen und Geschnittene Steine*, in press at the time of writing). He considers that the era is not a single one, and that Perga's coins start in 219; Phaselis' in the next year, 218; and Aspendus' in 210.

The latest coins in the Ayaz In Hoard appear to be the dated pieces here mentioned, and by Boehringer's chronology they were struck 193–2 and 191–0. The burial date of 190 B.C. or later suggested by Dr. Seyrig for the hoard would thus seem quite correct.

Baiyada (near Antaradus), 186 B.C. or later.

A hoard in Paris, possibly incomplete, of eleven Alexanders, among which were one of Messene (above, p. 56, and PLATE XX, 2); coins of Phaselis (year 33) and Aspendus (year 19); and three of Rhodes. A catalogue of the hoard and some casts and photographs are at the ANS.

This hoard is also mentioned by Dr. Seyrig in the article cited under the Ayaz In Hoard. The latest datable pieces are the Alexanders of Phaselis and Aspendus, which according to Boehringer's revised chronology (see under the Ayaz In Hoard) were struck 186–5 and 192–1 B.C. As on the Phaselis coin the Γ of the date ΛΓ was engraved over B, the coin was presumably struck in 186, and the hoard's burial may be dated no earlier than that year.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Chandrinus (*eparchy of Pylus*) 1964, 1st quarter 3rd century.

I. Varoucha-Christodoulopoulou, *Arch. Delt.* 19 (1964), p. 10, VII. Five bronzes: 3 Corinthian pegasus-trident (symbols Athena, amphora, wreath); 2 Argive wolf's head-large A (symbol Corinthian helmet). The notice dates the hoard to the first quarter of the third century, but the reason for this dating is not given.

Chiliomodi (*near Corinth*) 1932, 306 B.C.

Noe 239. O. Ravel, "A Corinthian Hoard from Chiliomodi," *Trans. Int. Num. Cong.* (London, 1938), pp. 98–108.

Corinth 1938, ca. 215 B.C.

S. P. Noe, "The Corinth Hoard of 1938," *ANSMN* 10 (1962), pp. 9–41. Contained one *ANSNS* 6, issue 60; one Megalopolis coin with markings of syrinx, ME and M in wreath, from Noe's die B; one Argos coin marked with club and APΓ; 1 uncertain Alexander with earring and ΠY; 2 uncertain aphlaston -ΔO coins (see notes 29 and 72); and 1 uncertain coin marked with cock and ΔO. See commentary on the Patras Hoard, below, for a comparison of these two hoards.

Corinth 1960, early 3rd century.

I. Varoucha-Christodoulopoulou, *BCH* 1960, p. 487, h. 114 tetradrachms of Athens; one of Philip III; ca. 30 of Alexander III, among which was one *ANSNS* 6, issue 32.

Demanhur 1905, 318 B.C.

Noe 324. E. T. Newell, *Alexander Hoards* II. *Demanhur*, *ANSNNM* 19 (New York, 1923).

Dokimion (*near Agrinion, Acarnania*) 1955, 3rd quarter 3rd century.

I. Varoucha-Christodoulopoulou, *BCH* 1956, p. 227,c. One *ANSNS* 6, issue 23, the only Alexander tetradrachm in a hoard of 49 silver coins, chiefly autonomous issues from the Peloponnese and central Greece.

Epidaurus 1903, ca. 280 B.C. or later.

A. D. Keramopoullos, *Eph. Arch.* 1903, pp. 97–116. A large hoard including 37 drachms and tetradrachms of Alexander III, among

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

which were 1 each *ANSNS* 6, issues 14, 23, 34, and 35; and 2 of *ANSNS* 6, issue 40. For suggestions of a burial date lower than 280 B.C. see p. 77.

Gordion V, after 208/7 B.C.

D. H. Cox, "Gordion Hoards III, IV, V, and VII," *ANSMN* 12 (1966), pp. 57–64. The hoard contained one *ANSNS* 6, issue 67. The burial date of 208/7 at the earliest is Cox's, based on Seyrig's discussion of the "Pamphylian Era" cited here in the commentary on the Ayaz In Hoard, and is thus uncertain and possibly too high. A later date, however, would have no significance for the present article.

Greece(?) 1924

A hoard of 5 Alexander tetradrachms purchased by Newell in 1924 in Rome. They are now at the ANS, and are catalogued on p. 92 and illustrated on PLATE XVI. Newell's notebooks record that in his opinion all the coins were obviously from the same find, but when or where this was made was not known. All the coins were in about the same state of preservation, very good to fine, although all had suffered somewhat from corrosion. Newell considered them all Peloponnesian.

Kiouleler (*Thessaly*) 1910–1911, ca. 285–275 B.C.

Noe 563–4. Newell's hoard notebooks show that among the Alexander tetradrachms in this hoard was one *ANSNS* 6, issue 24.

Latakia 1759, ca. 160–155 B.C.

Noe 603. J. Pellerin, *Mélanges de médailles* (Paris, 1765), I, pp. 104–140. The hoard presumably included one *ANSNS* 6, issue 35 (the cornucopia is described, although not the letters), one Argive Alexander with markings of wolf and ⅄, and 6 Rhodian Alexanders.

Macedonia 1961, ca. 279 B.C.

I. Varoucha-Christodoulopoulou, *BCH* 1962, pp. 420–1, no. 4. A large hoard of Alexanders including one *ANSNS* 6, issue 26 (Müller 875). The burial date is first considered the end of the fourth century, then possibly ca. 279. The latter is certainly more nearly correct.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Megalopolis 1947, ca. 223 B.C.

D. M. Robinson, "The Alexander Hoard of Megalopolis," *ANSMN* 4 (1950) pp. 13–28. This hoard included one each of *ANSNS* 6, issues 35, 48, and 69; one uncertain Alexander with serpent on altar and ΠΥ; and three late Megalopolitan Alexanders: Noe's die A, syrinx and ΜΕ; die C, ΤΙ, syrinx, ΜΕ, and ΑΡΙ; and die D, syrinx, ΜΕ, and ΤΕ.

Mektepini (*Phrygia*) 1956, ca. 190–188 B.C.

N. Olcay and H. Seyrig, *Le trésor de Mektepini en Phrygie* (Paris, 1965). This large and important hoard of 753 tetradrachms contained 1 each of *ANSNS* 6, issues 47 and 56; 3 Argive tetradrachms: one with markings of bucranium and ΑΡΓ, and two with harpa, ⅄ or ⅄, and possibly ⅄; one uncertain Alexander with markings of Dioscuri and ΙΣ; and 29 Pergamene and 63 Rhodian Alexanders.

The latest Alexanders present from Perga, Phaselis, and Aspendus were of years 29, 18, and 19, respectively. By Dr. Seyrig's chronology (see commentary on the Ayaz In Hoard), the latest absolute date of these pieces would be 193–192, and Dr. Seyrig dated the hoard's burial to ca. 190–188 B.C. By Boehringer's chronology, the lowest date of these pieces is 191–190, which does not necessitate lowering the suggested time of burial.

Mersin (*Cilicia*) 1960

A letter in the ANS files describes a hoard of ca. 150 Alexander tetradrachms, and a few of Philip III. The hoard included one coin of *ANSNS* 6, issue 25.

Mersin (?) (*Cilicia*) 1966, ca. 280 B.C.

The ANS files include photographs of this hoard of 21 tetradrachms of Demetrius Poliorcetes; 3 of Seleucus I; 4 (lifetime) of Lysimachus; and 72 of Alexander's types, of which 4 bear Philip III's name, and 8 Seleucus'. The Alexanders included 1 each of *ANSNS* 6, issues 35 (obverse die A65; new reverse); 37.2; and 43 (obverse die A86; reverse die P158). All the coins are in excellent condition, and there seems no reason to date the hoard's burial later than ca. 280. It is noteworthy that it was in Cilicia that Demetrius Poliorcetes was defeated and captured.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Olympia 1923, ca. 250–225 B.C.

Noe 754. E. T. Newell, *Alexander Hoards* IV. *Olympia*, *ANSNNM* 39, (New York, 1929). The hoard included one each of *ANSNS* 6, issue 24 (worn); my Peloponnesian Group I, 1(*ANSNS* 6, 42), 2 (*ANSNS* 6, 41), 3 (*ANSNS* 6, 40), 4 (*ANSNS* 6, pl. XIII, A), 6 (*ANSNS* 6, pl. XIII, B), and 7; and my Peloponnesian Group II, 1 and 4. Newell, p. 24, in his penultimate sentence dates the hoard's burial to ca. 235–225, and this dating has been widely followed. But earlier, pp. 22–3, Newell noted the absence of the common coins of Ptolemy III, and seemed to argue for an earlier date, giving a range of 250–225; and this is the range given in Noe's *Bibliography*, surely with Newell's knowledge and approval. Newell favored the particular decade 235–225 only because of an Illyrian raid on Elis in 231 and Aratus' invasion of 227; there is no numismatic reason to date the hoard so late. The latest datable coin in the hoard is a tetradrachm of Ptolemy II, dated 254. It and others of this king are in quite good condition, and it seems to the present writer that a burial of perhaps 245 or a little later is more likely than one in the decade 235–225. (Cf. J. Warren, "The Earliest Triobols of Megalopolis," *ANSMN* 15, p. 36, note 27, where a burial date as early as 240 B.C. is considered possible.)

Patras 1850, ca. 218 B.C.

Noe 795. C. T. Newton, in W. S. W. Vaux, "On a Hoard of Coins of Alexander the Great found near Patras," *NC* 1853–4, pp. 29–37.

A large and important hoard containing several miscellaneous earlier silver coins, possibly several staters of Alexander, 5 Aetolian pseudo-Alexanders, and 92 to 127 Alexanders (there is some uncertainty about three classes), most of them Peloponnesian. To list the varieties: 1 of *ANSNS* 6, issue 40; 10–15 (Newton is unclear) of 45–7, 50, 55; 9 and perhaps 10 of 58; 21 of 59; 22 of 60; 1 possibly of 59 or 60; 33 or 3 (Noe favors the latter, suggesting that Newton's 33 is due to dittography) of 63; 2 of 65; 7 of 67; 3 of 68; 1 of 70; 1 Argive club; 1 Argive club-ΦI; 1 corn-wreath-HP (Hermione?); 2 uncertain stela or obelisk (Ambracia?); 1 aplustre-P (Amphipolis); 4 bipennis (Miletus: *SNGCop.* 749; Tenedos: Cox, *Gordion V*, 12;

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

uncertain Carian: Mektepini nos. 411–5); and 1 shield-✳. Fourteen of the Alexanders have been identified in the Athens collection, and casts are here catalogued on pp. 92–3 and illustrated on PLATES XVII and XVIII, thanks to the kindness of Mme. Oeconomides.

The hoard has been dated by Newell to the late third century B.C. (*Demetrius Poliorcetes*, p. 135, note 5), and to the third quarter of the third century by Hackens (*Antidorum W. Peremans*, p. 76) although, in discussing possible occasions for its interment, Hackens goes as late as 220, strictly speaking later than the "third quarter."

I prefer to date the Patras Hoard's burial even a few years later. Granted that any coastal town near Aetolia must have had constant reason for guarding its possessions, the prime period for hoard burial in the late third century must have been the time of the Social War. Polybius lists any number of possible occasions during these troubled years for our hoard's burial: 220: Aetolians' pillage of Patras (4.6.9); 220: Aetolians and Illyrians march through Achaea, and back again (4.19.6–7); 219: Aetolians and Eleans battle with Dyme, Pherae, and Tritaea (4.59–60); 218: Philip marches through Patras and Dyme to Elis (4.83.1); 218: Philip sails from Corinth to Patras with 6000 Macedonians and 1200 mercenaries (5.2.11); winter 218–7: Aetolians and Eleans pillage territory of Dyme, Pherae, and Patras (5.30.2–5); spring 217: Aetolians and Eleans march from Elis through territory of Pherae and Aegium (5.94.3).

The period of the Social War thus seems the most likely time suggested by historical considerations for the Patras Hoard's burial. This dating, somewhat later than that of the Megalopolis Hoard, which was connected with the last phases of the war with Cleomenes, is a cornerstone of the argument that many of the issues first appearing in the Patras Hoard were struck *for* the Social War.

Lest this seem circular reasoning, I should like to cite the Corinth 1938 Hoard. Noe did not compare this to the Patras Hoard, but the points of agreement are striking (see the chart of late issues, p. 91, below). The latest datable coins in the Corinth Hoard belong ca. 228 and 226/5–223/2, and exhibit some slight wear. Noe suggested 215 as the Corinth Hoard's burial date, but it seems to the present author that the confusion of the Social War a few years earlier makes that period more probable. Hackens agrees that it may have been

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

interred a little prior to 215 ("La circulation monétaire dans la Béotie hellénistique: trésors de Thèbes 1935 et 1965," *BCH* 1969, p. 705, note 3. He here corrects to *215* the date of *225* he cited for this hoard in 1968 [*Antidorum W. Peremans*, p. 69]).

The Corinth Hoard's four Aetolian pseudo-Alexanders were in excellent condition; Noe cites this as suggesting that they too were struck for the Social War. Newton does not specifically mention the condition of the five Patras Hoard Aetolian pieces, and they have unfortunately not been identified at Athens, but they were probably also fresh, as 1) four of the five were apparently of the same issue; 2) Newton thought the device on one shield was a serpent (?), implying the coin was unworn; and 3) he thought the Aetolian pieces might date from as late as 200 B.C., and, as he was remarkably scrupulous for his age in comparing wear, it is unlikely that he would have considered so late a date had the coins been worn. The Aetolian pieces, and their freshness, thus form a strong point of agreement between the two hoards.

It is intriguing, in fact, to consider the possibility that the Patras Hoard, so rich in issues here ascribed to Corinth, may have in large part come from Corinth to Patras with Philip's army in 218 (see above) soon after the Achaeans had voted their financial support of Philip (spring 218: 50 talents, [3 months' pay for his troops] and 10,000 medimni of corn immediately; and thenceforward, so long as he was in the Peloponnese, 17 talents per month: Polybius 5.1.11–12). Polybius (5.2.11) notes that before Philip set out from Corinth with 6,000 Macedonians and 1,200 mercenaries he paid his men and issued rations. One may well infer that payment was a sporadic event, and that the moneys paid on this occasion were precisely those recently voted by the Achaeans—and very probably struck at Corinth. I submit that they comprise the bulk of the Patras Hoard, and that the hoard was buried in 218 or very shortly thereafter, very little if at all earlier than the Corinth 1938 Hoard.

Pontoleivado-Kilkis (*Macedonia*) 1961, ca. 288–275 B.C.

I. Varoucha-Christodoulopoulou, *BCH* 1962, pp. 418–9, no. 2. Fifty-two coins, among them 21 tetradrachms of Alexander III, including one *ANSNS* 6, issue 26.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Prilepec, near Prilep (*Macedonia*) 1950.

D. Voutchkovich-Todorovich, "Le dépot de monnaies grecques du village Prilepec près de Prilep," *Glasnik* 12 (1958), pp. 213–255. The article describes 208 of a larger number of tetradrachms in the original hoard. Among the 137 Alexanders were 3 *ANSNS* 6, issue 22; 1 *ANSNS* 6, issue 25; and 1 uncertain coin with markings of dolphin and ON (the letters so described, but the obverse is that of an ANS cast of the dolphin-NO issue; the pictured reverse does not show the letters clearly).

Salonica before 1897, after 287–6 B.C.

Noe 896. The hoard included one "palm"-ΔO coin (probably aphlaston-ΔO, but whether of *ANSNS* 6, issue 29 or the issue represented by Corinth Hoard 146–7 cannot be determined), and one uncertain coin with markings of dolphin and ON (perhaps NO, but see above, under the Prilepec Hoard).

Serbia 1951, ca. 220 B.C.

V. J. Hunter, "A Third Century Hoard from Serbia and its Significance for Celtic History," *ANSMN* 13 (1967), pp. 17–40. This hoard contained one coin of *ANSNS* 6, issue 30.

Sophikon (*near Epidaurus*) 1893, ca. 220 B.C.

Noe 997. J. Svoronos, *JIAN* 1907, pp. 35–46, and later publications listed in Noe. A large and varied hoard found in the sea, it contained 1 late Megalopolitan Alexander (Noe's die C, markings TI, syrinx, ME, and API), 1 Aetolian pseudo-Alexander, and 1 Spartan tetradrachm of the Athena head-seated Heracles variety. The hoard's "burial" has been dated to 230–220 by Newell (*ESM*, p. 76), and to ca. 220 by Regling (*Die Münzen von Priene* [Berlin, 1927], p. 43) and Noe (*ANSMN* 10, p. 34).

Sparta 1908, ca. 222 B.C.

Noe 1004. A. J. B. Wace, "A Hoard of Hellenistic Coins," *BSA Annual* 1907–8, pp. 149–158. This hoard included one *ANSNS* 6, issue 26 (very worn), 1 Alexander with wolf's head-ΠΥ (my Peloponnesian Group I, 10), and 7 Spartan tetradrachms of the Athena head-

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

seated Heracles variety. Previously thought to have been buried ca. 245–240 B.C., the hoard was redated to ca. 222 by Noe in *ANSMN* 10, p. 33.

Trikkala (*Thessaly*) 1938.

P. Lemerle, *BCH* 1938, p. 446, no. 4 (no description of individual coins). Dr. M. Jessop Price has kindly made available to me photographs which show that the hoard's one Alexander was an example of *ANSNS* 6, issue 23.

HOARD RECORD: PELOPONNESUS 1962 HOARD AND PROPOSED ASSOCIATED ISSUES

		Epidaurus ca. 280 or later	*Peloponnesus 1962* ca. 250–240	*Olympia* ca. 250–225	*Megalopolis* ca. 223	*Sparta* ca. 222	*Patras* ca. 218	*Corinth* ca. 215
	ΒΑΣΙΛΕΟΣ ΑΡΕΟΣ, Ꟊ or 𐊠		1					
I	1. Athena Promachus F			1				
	2. Athena Promachus			1				
	3. Athena Promachus ΕΥ	2		1				
	4. Bee ΠΥ			1			1	
	5. Biga							
	6. Biga ΑΞ			1				
	7. Fulman ΠΥ		1	1				
	8. Earring ΠΥ		1					1
	9. Serpent on altar ΠΥ				1			
	10. Wolf's head ΠΥ					1		
II	1. Ꟊ in wreath		1	1				
	2. Crested helmet		2					
	3. Crested helmet and seven-pointed star							
	4. Seven-pointed star		1	1				
	5. Hanging wreath		1					
III	1. Corinthian helmet		1					

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

	Olympia ca. 250–225	*Megalopolis* ca. 223	*Greece (?) 1924*	*Sophikon* ca. 220	*Patras* ca. 218	*Corinth* ca. 215	*Gordion V* after 208/7	*Meleḥpinī* ca. 190–188	*Ayaz In* ca. 190 or later	*Asia Minor, Central* ca. 190–188	*Baiyada* 186 or later	*Latakia* ca. 160
Sicyon												
Megalopolis*		dies A,C,D	die A	die C		die B			die C			
Argos					club	club		bucranium, harpa-		harpa-		wolf-
Corinth(?)			vertical trident		Athena, vert.&hor. tridents, Dioscuri	Athena	Dioscuri					
Messene											tripod	
Hermione (?)					corn-wreath							
Uncertain		winged fulmen			winged fulmen		winged fulmen					
Aetolia				×	×	×						
Rhodes								×	×	×	×	×
Pergamum								×	×			

* The dies are Noe's, *ANSMN* 10, pp. 40–1.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

KEY TO PLATES

Plates IX–X

Peloponnesian Hoard. Catalogue on p. 67.

Plates XI–XV

Peloponnesian Hoard issues and associated strikings. Catalogue on pp. 67–9.

Plate XVI

Greece (?) 1924 Hoard. The coins, at the ANS, bear the types and name of Alexander. Pp. 53, 55, 84.

1 Corinth (?). *Rev.* to l., vertical trident head; below throne, ΔA. *ANSNS* 6, 64.2: coin illustrated is this coin. ↑ 16.53.
2 Sicyon. *Rev.* to l., boy with fillet; below throne, Ϙ. *ANSNS* 6, 47.1: coin illustrated is this coin. ↙ 16.16.
3 Megalopolis. *Rev.* to l., syrinx and ΜΕ; below throne, traces of uncertain marking. *ANSMN* 10, p. 40, A-1: coin illustrated is this coin, although the obverse of A-1 has been transposed on the plate with that of C-8. ↖ 16.26.
4 Uncertain. *Rev.* possible traces to l. of stag standing, r. ↑ 16.63.
5 Uncertain. *Rev.* no symbols or monograms. ↑ 16.60.

Plate XVII

Patras Hoard. The coins, in Athens, bear the types and name of Alexander. Pp. 53–61, 86–8.

Corinth (?)

1 *Rev.* to l., horizontal trident; below throne, Ϙ. Nikes on throne back. *ANSNS* 6, 58.1a: coin illustrated is this coin. ↑ 16.89.
2 *Rev.* to l., Athena Promachus; below throne, ΔΕ. Nikes on throne back. *ANSNS* 6, 59.1a: coin illustrated is this coin. ↑ 17.06.
3 Obverse die of no. 2. *Rev.* to l., Athena Promachus; below throne, ΘΕ. Nikes on throne back. *ANSNS* 6, 60.1a: coin illustrated is this coin. ↑ 17.06.
4 Obverse die of nos. 2 and 3. Reverse markings of no. 3. *ANSNS* 6, 60.3a: coin illustrated is this coin. ↑ 17.10.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

5 *Rev.* to l., Dioscuri; below throne, ΑΛΕ. Nikes on throne back. *ANSNS* 6, 63.1: coin illustrated is this coin. ↑ 16.95.

Sicyon

6 *Rev.* to l., boy with fillet; below throne, bird above ⊬P. Traces of Nikes on throne back. *ANSNS* 6, 45.3a: coin illustrated is this coin. ↑ 16.95.

7 *Rev.* to l., wreath above boy with fillet; below throne, ⊬P. *ANSNS* 6, 55.1a: coin illustrated is this coin. ← 16.77.

Plate XVIII

Patras Hoard. The coins, in Athens, bear the types and name of Alexander. Pp. 53–61, 86–8.

Argos

1 *Rev.* to l., club. The name has been recut to read downward, retrograde. *ANSMN* 10, p. 38, B-6, a and b: coin illustrated is this coin. ↑ 16.78.

2 Obverse die of no. 1. *Rev.* to l., club; below throne, ΦI. *ANSMN* 10, p. 38, B-4, a and c: coin illustrated is this coin. ↑ 16.75.

Hermione (?)

3 *Rev.* to l., wreath of corn ears; below throne, ⊬P. ↑ 16.64.

Uncertain

4 *Rev.* to l., winged fulmen; below throne, ΦI. Nikes on throne back. *ANSNS* 6, 67.3b, not illustrated. ↑ 16.85.

5 *Rev.* to l., winged fulmen; below throne, ⍃; in exergue, ΑΛ. Nikes on throne back. *ANSNS* 6, 70.1b, not illustrated. ↗ 16.99.

6 *Rev.* to l., bipennis. ↑ 17.05.

7 *Rev.* to l., stela or obelisk. ↓ 17.06.

Plate XIX

Comparative Material.

Types of Alexander.

1 *Rev.* to r., ΒΑΣΙΛΕΩΣ; to l., ΑΝΤΙΓΟΝΟΥ and ΞΚ. Struck in Macedonia, probably at Pella, under Antigonus Gonatas. Athens, ↘ 16.91. Note 68.

Types and name of Alexander.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

2 Obverse die of no. 1. *Rev.* to l., Ꝛ; below throne, ⊜. ANS, ↖ 16.78. Note 68.

3 *Rev.* to l., trident head; below throne, ♦. Leningrad. Note 68.

4 *Rev.* to l., dolphin; below throne, NO. ANS (Armenak Hd.), ↓ 17.12. Note 29.

5 *Rev.* to l., fulmen; below throne, ΔO. ANS (Armenak Hd.), ↘ 17.11. Notes 29 and 72.

Types, name, and title of Alexander.

6 *Rev.* to l., dove in wreath; below throne, H. Cf. *ANSNS* 6, issue 19. Stockholm (E. von Post), ↑ 16.78. Note 12.

7 *Rev.* to l., aphlaston; below throne, NO. *ANSNS* 6, issue 28 (new dies). New York (W. P. Ames), ↑ 16.90. Note 13.

Corinth Æ. *Obv.* Pegasus; *rev.* ornamented trident head. Only the reverses are illustrated, enlarged.

8 *Rev.* to l., aphlaston; below, ΔΩ. ANS, ↙ 1.85. Note 22.

9 *Rev.* to l., amphora; below, ΔΩ. ANS, ← 1.59. Note 23.

Plate XX

Comparative Material.

Types, name, and title of Antigonus Doson.

1 *Rev.* below, trident and Ꝑ. Glasgow (*Hunterian*, I, p. 340, 2), ↙ 17.08. Note 34.

Types and name of Alexander.

2 Messene. *Rev.* to l., ΜΕΣ over tripod; below throne, ΞΕ over over ΔA. Title to r., name to l. Paris (Baiyada Hd.), ↑ 16.74. Pp. 56, 63–6, 82.

3 Messene. Obverse die of no. 2. *Rev.* to l., ΜΕΣ over tripod; below throne, I over ΔA. ANS, ↑ 15.44 (broken). P. 56.

4 Pellene (?). *Rev.* to l., chelys; below throne, ΠΕ. Berlin, ↑ 16.40. Pp. 58, 61.

5 Megalopolis. *Rev.* to l., TI over ΜΕ; below throne, API; to r., outside inscription, syrinx. London, ↑ 16.98. Note 43.

6 Megalopolis. *Obv.* on lower part of headdress, Ꝕ. *Rev.* to l., syrinx above ΜΕ above ΤΕ. *ANSMN* 10, p. 41, dies D-9. Beirut (S. Nahas), ↑ 16.75. Note 43.

7 Argos. *Rev.* to l., harpa; below throne, ♣. Paris, ↗ 16.40. Note 50.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE ALEXANDER TETRADRACHMS OF PERGAMUM AND RHODES[1]

(PLATES XXI–XXXIV)

FRED S. KLEINER

Nearly a century ago, Friedrich Imhoof-Blumer published his comprehensive study of the coinage of Pergamum.[2] For almost as long, his system of classification remained unquestioned. Recently, however, Dorothy H. Cox fundamentally challenged his ordering of the Philetaerus tetradrachms when the monogram [illegible], formerly ascribed to Eumenes II (197–159 B.C.), turned up on a coin in a hoard buried at Gordion in the last decade of the third century B.C.[3] In 1960 the whole regnal series was thoroughly reexamined by Ulla Westermark, who proposed a new chronology to replace that of Imhoof-Blumer.[4]

The autonomous issues of Rhodes have never been the subject of a monograph,[5] and the Alexander issues of that mint have only been

[1] I am grateful to Margaret Thompson for introducing me to the study of numismatics and for supervising this paper at every stage of its composition. I also wish to thank O. Mørkholm, M. Price, H. Seyrig, and N. Waggoner, who read preliminary drafts of the manuscript and made many helpful suggestions. The Rhodian section of this paper is heavily in debt to an unpublished seminar report on file at the American Numismatic Society by Peter Way of Columbia University. Dr. Seyrig put his extensive file of photographs at my disposal, as well as his notes on the Ayaz In and Adramyteum hoards. Casts or photographs were kindly supplied by the following: M. Price (London), G. Le Rider and M. Mainjonet (Paris), M. Maaskant-Kleibrink (Hague), Dr. and Frau H.-D. Schultz (Berlin), and M. Comstock (Boston).

After this article went to press, Miss N. Olçay, curator of coins at the Archaeological Museum of Instanbul, kindly sent casts of those Pergamene Alexanders not illustrated in the publication of the Mektepini hoard (below, note 6). These new specimens revealed no new obverse dies or links between issues.

[2] F. Imhoof-Blumer, *Die Münzen der Dynastie von Pergamon* (Berlin, 1884).

[3] D. H. Cox, *A Third Century Hoard of Tetradrachms from Gordion* (Philadelphia, 1953), no. 75.

[4] U. Westermark, *Das Bildnis des Philetairos von Pergamon, University of Stockholm Studies in Classical Archaeology* 1 (1960).

[5] Such a study is currently being prepared by R. Ashton of Brasenose College, Oxford.

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

treated briefly in more general studies.[6] A comprehensive reexamination of the Pergamene and Rhodian Alexanders has been long overdue. A large hoard found at Mektepini in Phrygia in 1956[7] has made such a proposal feasible, but much of the evidence has been available for some time.

Approximately 280 specimens have been included in the present study. Every one of the coins may be placed in sequence on the basis of die linkage, stylistic criteria, or the character and placement of the symbols and monograms. All indications point to quite firm conclusions: first, that the Alexanders of both states were of short duration; second, that they were contemporary with Rhodian autonomous issues, and Pergamene regnal types of similar denomination, and were earmarked for a specific purpose; third, that their issuance was intimately associated with the political alliances of the time.

PERGAMUM

Obv: Head of Heracles in lion's skin, r.
Rev: ΑΛΕΞΑΝΔΡΟΥ Zeus enthroned, eagle in r., scepter in l.

No borders. All marks in left field of reverse. Letters indicate obverse die numbers; Arabic numerals indicate reverse die numbers; *x* indicates that die was unavailable for study; hoard provenances are in parentheses; examples preceded by an asterisk are illustrated.

Group I: *Symbols*

Series I: No mark

A-1. *ANS-ETN (Asia Minor 1929) 16.92 ↑; Seyrig Coll.
A-2. ANS-ETN 16.82 ↑; Hague.
A-3. Seyrig Coll.
B-4. *Hague 16.95 ↑.

[6] *BMCCaria*, p. cix. L. Müller, *Numismatique d'Alexandre le Grand* (Copenhagen, 1855) I, p. 260; II, nos. 1154–1167. C. Babington, "On an Unpublished Tetradrachm of Alexander III, Struck at Rhodes; with some Observations on the Rhodian Symbol and Other Matters Connected with Rhodes," *NC* 1864, pp. 1ff. A. R. Bellinger, *Essays on the Coinage of Alexander the Great*, *ANSNS* 11 (New York, 1963), p. 92.
[7] N. Olçay and H. Seyrig, *Le Tresor de Mektepini en Phrygie* (Beirut, Institut Français d'Archéologie, 1965).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Series II: Owl

C-5. *Istanbul (Gordion 1951, 13-C176) 15.59 ↑.

Series III: Loutrophoros

D-6. *ANS-ETN (Asia Minor 1929) 16.96 ↑; ANS-ETN 16.67 ↑; Boston (Asia Minor 1929, Brett 701) 16.95 ↑; Hague 17.20 ↑.
D-7. M. Chiha Coll.; Istanbul (Mektepini 1956, 273) 16.93.

Series IV: Bee

E-8. ANS-ETN 16.85 ↑.
E-9. Naville 1, April 1921, 931, 16.96.
E-10. Berlin 16.28 ↑; Hague 17.00 ↑
E-11. *Berlin 16.95 ↑.
F-12. *ANS-Gautier 16.87 ↑; London 16.52 ↑; American University, Beirut.
G-13. *ANS-ETN (Rumania 1937) 16.92 ↑; P. Saroglos Coll.; Princeton (pierced).
G-14. Sofia.
H-15. *Hague 17.00 ↑.
H-16. Berlin 16.88 ↑.

Series V: Bee + Cornucopia

H-17. *Berlin 16.91 ↑.

Series VI: Wreath + Star

H-18. *ANS-ETN (Rumania 1937) 16.93 ↑; London 17.00 ↑.

Group II: *Symbols + Letters or Monograms*

Series VII: Bee + E

H-19. *ANS-ETN (Asia Minor 1929) 17.06 ↑; ANS 16.92 ↑.

Series VIII: ℞ + Thyrsos

I-20. ANS-ETN 16.93 ↑
I-21. *Berlin 16.89 ↑.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Series IX: ⍝ + Bee

J-22. Paris (Adramyteum 1954) 17.00 ↑; American University, Beirut.
J-23. *Hague 17.05 ↑.
J-24. Glasgow (*Hunterian* 79) 17.07 ↑.
K-24. Six Coll. (= Imhoof-Blumer pl. III, 22).
K-25. *ANS-ETN (= Egger 40, May 1912, 654) 16.27 ↑.
K-26. M. Chiha Coll.
x-x. Istanbul (Mektepini 1956, 275) 16.92.

Series X: ⍝ + Bee, l. field; o behind throne.

J-27. ANS 16.83 ↑; ANS-ETN 16.91 ↑; London 16.93 ↑; *Hague 17.10 ↑.

Series XI: Δl + Bee

K-28. M. Chiha Coll.; Munich.
K-29. Hague 17.00 ↑.
K-30. *ANS-ETN 17.03 ↑.
K-31. ANS 15.94 ↑.
L-32. London 16.93 ↑.
L-33. *Hague 17.00 ↑.
M-34. Glasgow (*Hunterian* 78) 17.01 ↑.
M-35. *Paris.
N-30. *London 16.94 ↑.
N-*x*. Istanbul (Mektepini 1956, 277) 16.80.

Series XII: Δl + Star

K-36. *Hague 16.95 ↑.
K-37. London 16.87 ↑.
O-37. *Istanbul (Mektepini 1956, 276) 16.70.
P-38. *Istanbul (Mektepini 1956, 286) 16.72.

Series XIII: Δl + Palm Branch

P-39. *London 16.76 ↑.
Q-40. *ANS-ETN (= Egger 41, November 1912, 390) 16.08 ↑.

Series XIV: ⍝ + Bee

L-41. *ANS-BYB (*SNG* 311) 16.83 ↑.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Series XV: ΗΡ + Ivy Leaf

N-42. Hague.
N-43. Istanbul (Mektepini 1956, 278) 17.00.
N-44. *Berlin 16.88 ↑

Series XVI: Η + Club

R-45. *London 16.33 ↑; Paris (Ayaz In) 16.96 ↑.

Series XVII: ΑΙ + Star

S-46. *Istanbul (Mektepini 1956, 279) 16.85.
S-*x*. Istanbul (Mektepini 1956, 280–283) 16.63, 16.90, 16.90, 16.94.

Series XVIII: ΝΡ + Serpent

S-47. *Istanbul (Mektepini 1956, 284) 16.87.
T-48. *Paris.
x-x. Commerce (Mektepini 1956, 285) 17.02.

SEQUENCE OF ISSUES

Group I: *Symbols*
- No Mark
- Owl
- Loutrophoros
- Bee
- Bee + Cornucopia
- Wreath + Star

Group II:

Symbols + Letters or Monograms
- Bee + E
- ΑΡ + Thyrsos
- ΑΡ + Bee
- ΑΡ + Bee + o
- ΔΙ + Bee
- ΔΙ + Star
- ΔΙ + Palm Branch
- ΗΡ + Bee
- ΗΡ + Ivy Leaf
- Η + Club
- ΑΙ + Star
- ΝΡ + Serpent

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The Pergamene Alexander issues present a special problem to the numismatist for they bear no common distinguishing marks which indicate the mint of origin. In Imhoof-Blumer's treatment of the series, fifteen types were collected and identified as Pergamene on the basis of the marks which appear in the left field of the reverses, many of which may also be seen on the Philetaerus types.[8]

This method is useful—but only to a degree—for many of the Pergamene marks, especially the bee, the star, and ΔΙ, are used by other mints. The attribution of Alexanders to Pergamum must rest ultimately upon considerations of style and provenance, in conjunction with a comparison of the Philetaerus marks. A careful study of the tetradrachms, based on many more specimens than Imhoof-Blumer had at his disposal, has led to the rejection of three of his types from the Pergamene series.[9] At the same time, the additional material has necessitated an expansion of the corpus of Pergamene Alexanders, including marks not found on the Philetaerus tetradrachms.

A new attribution to the Pergamene mint, and the earliest in the series of Alexanders, is an issue which bears no mark whatsoever on either the obverse or reverse. The inclusion of this series rests solely upon the criterion of style; but it is reassuring to note that one of the seven known specimens comes from the 1929 Asia Minor hoard, in which there were twelve regnal Pergamene coins and three other

[8] Imhoof-Blumer, pp. 16f.

[9] ΠΡ + thyrsos: (Müller 1251). The thyrsos is a Pergamene mark, but not exclusive to this mint. The monogram is foreign, and the style and format of a specimen with these marks in Paris is totally unrelated to the Pergamene issues. Both obverse and reverse dies have a border of dots, and the manner of depicting the hair on the obverse is unknown on the Pergamene dies. The modelling of the nose, lips, and eyes is also quite different.

Μ + stylis: (Müller 1257). The stylis is present on some Philetaerus types, but the initial is never used. Three specimens in London, the Hague, and Copenhagen (*SNG* 869), all struck from the same obverse die, differ in style from the Pergamene designs. The looped form of knot is never used, and the manner of depicting the hair, particularly of the mane, is alien.

Μ + star + owl: (Müller 927a). The marks do occur on the Philetaerus tetradrachms, but never together. The obverse die of a specimen of this series in the American Numismatic Society, from the 1950 Propontis hoard, is unlike any Pergamene die in terms of style, especially regarding the hair of the lion's skin.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Alexanders from the Pergamene mint. The seven examples of this series are struck from two obverse and four reverse dies. The engraver of the obverse dies (A and B) is readily identifiable as the cutter of the obverse dies of the other Pergamene Alexanders in the Asia Minor hoard. The style of this man, who shall be referred to as *Hand A*, is quite distinctive. Two prominent features immediately set him apart from the other Pergamene die cutters: the form of the knot under Heracles' chin, which resembles rolled dough; the single tier of locks curving from right to left over the forehead.[10] The men working on the four reverse dies of this first series also produced other Pergamene dies. This may be readily demonstrated by a comparison of the specimens illustrated with other reverse dies, in terms of the position of the left arm, the angle between right forearm and upperarm, and the position of the legs, torso, and head of the seated Zeus. The similarity of other details, such as the size and form of the eagle, and the manner of rendering the throne, is also significant.

The second series consists of a unique specimen from the Gordion hoard,[11] with an owl in the left field of the reverse. This symbol occurs alone, and in conjunction with a bee, on the Philetaerus tetradrachms, and is similarly located on the reverses.[12] The obverse die (C) has been engraved by *Hand A*.

Hand A also designed obverse die D, which is associated with reverse dies having a loutrophoros as distinguishing symbol. This series has been previously attributed to Pergamum by Seyrig,[13] and three examples are present in the 1929 Asia Minor and 1956 Mektepini hoards. E. T. Newell's notes regarding a fourth specimen, formerly

[10] Close in style to the Pergamene obverses of *Hand A* is a coin in the Mektepini hoard (274) attributed by Seyrig to Pergamum. However, not only do the reverse marks, a bearded head + ⋀, bear no relationship to those on other Pergamene coins, but the monogram appears in the exergue of the reverse, unlike the Pergamene *schema*. Furthermore, this die can be linked to a reverse in the Hague which bears the marks ⊔ + bearded head in the left field, and ⋽ beneath the throne. These marks are also foreign to Pergamum, and the attribution must be rejected.

[11] *Gordion* no. 13–C176.

[12] Westermark, pl. 12. It is interesting to note that on the regnal issues the owl is linked to a reverse with two marks: an owl and a bee.

[13] *Mektepini* no. 273.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

in his collection and now in the ANS, state that the piece was "in a find of Pergamene and Seleucid" coins. Although the loutrophoros does not appear on the Philetaerus types, the style of obverse die D establishes its Pergamene origin beyond reasonable doubt.

Series IV, V, VI, and VII are linked by a common obverse die (H), designed by *Hand A*, and document a transition in the Pergamene reverse marks from a single to a dual symbol type, and finally to a pairing of one symbol with one or more letters or a monogram, the system which persists for the duration of the Alexander issues. Series IV has a bee in the left field of the reverse, a mark common on the Philetaerus tetradrachms of Westermark's Group VI, b.[14] Thirteen examples of this type are known, all struck in conjunction with obverse dies of *Hand A*. Series V is the first of two dual symbol series, adding a cornucopia to the bee, the former also being a frequent Pergamene mark.[15] The second, Series VI, pairs a wreath and a star.[16] Both series are quite rare, consisting of only one and two specimens respectively, but were nevertheless known to Imhoof-Blumer. Series VII introduces the first letter mark, E, in conjunction with the familiar Pergamene bee. It is known in two examples, one of which is from the 1929 Asia Minor hoard.

With Series VIII, IX, and X,[17] all recognized as Pergamene by Imhoof-Blumer, a new minting authority makes his appearance, and two new die cutters are employed. *Hand A* ceases to produce any dies after Series VII.

The monogram of the new magistrate is ⍝, a mark which occurs in conjunction with a thyrsos on the reverses of Series VIII coins. Both the monogram and symbol occur independently on the Philetaerus issues.[18] The single obverse die of Series VIII (I) is the work of *Hand B*, whose style is easily distinguished from that of *Hand A*. The knot under Heracles' chin is no longer rolled, but truly tied, revealing three thin claws. A single tier of hair falls over the hero's brow, but suddenly parts in two opposite directions over the ear.

[14] Westermark, pls. 11, 12, and 13; Müller 1018.
[15] Westermark, pls. 9 and 10; Müller 1023.
[16] Müller 927.
[17] Müller 1250, 1019, and 1020.
[18] Westermark, pls. 11, 12, and 13.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The top of the lion's head is summarily treated, as in the work of *Hand A*, but the hair of the mane falls in long, loose locks, quite different from the more compact rendering of his predecessor.

The ⍝ monogram also appears on Series IX and X, closely related issues. Series IX has the ⍝ and a bee in the left field of the reverse, a combination exactly duplicated on the Philetaerus tetradrachms.[19] Series X adds an o behind the throne of Zeus, just below his left arm. A common obverse die (J), the work of *Hand B*, is used for both issues, but Series IX also appears in conjunction with a second obverse die (K), which is the design of a new die cutter. This man, *Hand C*, uses the three-claw knot, but renders the hair of the lion's mane more compactly than *Hand B*, and places a double tier of locks over Heracles' forehead.

This same die (K) is used for Series XI and XII, which were minted under a new authority, whose mark is ΔI. On Series XI reverses the ΔI is accompanied by the familiar bee, and on those of Series XII by the Pergamene star.[20] Both issues were included in Imhoof-Blumer's corpus, and have exact parallels on the Pergamene regnal coinage.[21]

Series XII is linked to Series XIII by a common obverse die (P), and is the third and last series to display the ΔI marking, this time in conjunction with a palm branch. These marks occur together on the Philetaerus tetradrachms,[22] and the series was identified as Pergamene by Imhoof-Blumer although it is represented by only two specimens. The two examples are interesting because they are struck from obverse dies (P and Q) of a fourth Pergamene designer, *Hand D*. This man's style is similar to that of *Hand B* in the rendering of the hair and the lion's skin, but he gives a less heavy set to Heracles' jowls and more prominence to the nostrils of the lion.

A new magistrate, whose monogram is ⍈, appears on the reverses of Series XIV, XV, and XVI. Series XIV pairs the monogram with the Pergamene bee, Series XV with an ivy leaf, and Series XVI with a club.[23] Two of these were known to Imhoof-Blumer, and the third

[19] Westermark, pl. 11.
[20] Müller 1022 and 926.
[21] Westermark, pls. 12 and 13.
[22] Westermark, pl. 13.
[23] Müller 250, 1058, and 1059.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

is duplicated on the regnal issues.[24] Series XIV and XV were struck from two dies previously used by ΔI, L and N.

Die R, used for Series XVI, introduces the work of *Hand E*, whose style is the most distinctive of the five which have been identified. The area of the lion's head from ear to eye is greatly emphasized, and a rich pattern of flamelike locks begins above the ear level. The hair over the forehead is combed in a large roll and then flows from right to left, falling in front of the ear. In this man's work, the knot under Heracles' chin has become a full paw, quite distant from the rolled form of *Hand A*.

The two remaining Pergamene series continue the pattern established by the earlier issues. One was recognized by Imhoof-Blumer, and both appear on the regnal coins.[25] Series XVII, AI and star,[26] and Series XVIII, ΝΡ and serpent, share a common obverse die (S) which links the two magistracies. Both dies used in these last two series are products of *Hand E*.

The AI and ΝΡ markings are not linked to any of the previous series of Alexanders, although the designer of the obverses produced a die for ΒΙ. On the Philetaerus tetradrachms, however, magistrate AI shares two common dies with authority ΔI.[27]

Certain preliminary conclusions can be reached about the chronology of the Pergamene Alexanders, even without reference to hoards (which will be considered in conjunction with the Rhodian hoards). The fact that three different men cut only seven dies under one authority (ΔI) points to a coinage of small quantity and of very short duration. Why else would three men be employed at once for so few dies? Secondly, since the ΔI mark is linked to two other magistrates, ΑΦ and ΒΡ, on the Alexanders, and to AI on the Philetaerus types, the tenures of these authorities cannot have been very long. The entire Alexander coinage of Pergamum could well have been struck in a decade. A discussion of just which decade will be postponed until the Rhodian series has been treated.

[24] Westermark, pl. 12.
[25] Westermark, pls. 12 and 13.
[26] Müller 925.
[27] Westermark, pl. 13.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

RHODES

Obv.: Head of Heracles in lion's skin, r.
Rev.: ΑΛΕΞΑΝΔΡΟΥ Zeus enthroned, eagle in r., scepter in l.

Border of dots on obverse and reverse; rose in left field of reverse on all specimens; monograms and magistrate names in left field of reverse; PO under throne. Letters indicate obverse die numbers; Arabic numerals indicate reverse die numbers; *x* denotes that die was unavailable for study; hoard provenances are in parentheses; examples preceded by an asterisk are illustrated.

Group I: *Monograms*

Series I: ⟨monogram⟩ (= ΤΙΜΑΙΟΣ) under throne; PO in left field; no border on obverse.

A-1. *ANS-ETN 16.63 ↑.
A-2. ANS 16.82 ↖.
A-3. J. Wertheim Coll.
A-4. London 17.17 ↑ (countermarked at Cnossus).
A-5. Beirut Museum.
x-x. (Tortose 1940).

Series II: ⟨monogram⟩ (= ΕΥΚΡΑΤΗΣ) under throne; PO in left field; no border on obverse.

A-6. *M. Chiha Coll.

Series III: ⟨monogram⟩ (= ΤΕΙΣΥΛΟΣ); no border on obverse.

B-7. *ANS-ETIN 17.16 ↑.
B-8. ANS-ETN 16.92 ↑.
B-9. Copenhagen (*SNG* 759) 17.28 ↑.
B-10. Seyrig Coll.
B-11. Jameson 994, 17.31.
B-12. Istanbul (Mektepini 1956, 427) 16.80.
B-13. Istanbul (Mektepini 1956, 429) 16.83.
C-14. *ANS-ETN 17.12 ↖; Weber 2109, 17.07.
C-15. Istanbul (Mektepini 1956, 428) 16.52.
D-16. *ANS-ETN 16.93 ↖.
E-17. *ANS-ETN 17.09 ↑; Naville 5, June 1923, 1429, 17.07.
E-18. Hess-Leu 36, April 1968, 164, 16.57 ↑

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

F-19. *Seyrig Coll.
G-20. *London.
x-x. Istanbul (Mektepini 1956, 430–432) 17.04, 17.12, 16.56.

Series IV: 𐅄 (= AINHTΩP)

H-21. *ANS-BYB (*SNG* 320) 16.97 ↑.
I-22. *ANS-Storrs 16.13 ↖.
I-23. Copenhagen (*SNG* 761) 16.31 ↑.
I-24. London.
I-25. Istanbul (Mektepini 1956, 439) 17.03.
J-26. Cambridge (*McClean* 3472), 17.06 ↖.
J-27. *Paris (Latakia 1956) 16.62 ↖.
K-28. *London.
x-x. Istanbul (Mektepini 1956, 440, 441) 16.95, 17.21.

Series V: 𐅅 (= ΣTAΣIΩN)

L-29. ANS-ETN (Central Asia Minor 1925) 16.83 ↑.
L-30. *ANS-ETN 16.97 ↑.
L-31. ANS 17.00 ↖.
L-32. Paris 17.08 ↖.
L-33. Istanbul (Mektepini 1956, 433) 16.60.
L-34. Superior, Los Angeles, 1970 Fixed Price List, 1518.
L-35. Naville 6, January 1924, 762, 17.02.
M-36. *ANS-ETN (Central Asia Minor 1925) 16.06 ↖.
M-37. ANS-Gautier 16.83 ↖; ANS 15.53 ↖.
M-38. London.
M-39. Paris 16.82 ↑.
M-40. Paris (Mektepini 1956, 437) 16.59 ↑.
M-41. Istanbul (Mektepini 1956, 435) 17.20.
N-42. ANS-Storrs 16.12 ↖.
N-43. *ANS-ETN 17.07 ↑; Istanbul (Mektepini 1956, 434) 17.17.
N-44. Hague.
N-45. Egger 5, May 1912, 658, 17.11.
O-46. *ANS (Propontis 1950) 16.91 ↖.
x-x. Istanbul (Mektepini 1956, 436) 16.75.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Series VI: ΑΒ (= ΑΡΙΣΤΟΒΟΥΛΟΣ)

P-47. *Vienna.
Q-47. *ANS-ETN 17.11 ↖.
Q-48. Hollschek Coll.
Q-49. Copenhagen (*SNG* 760) 16.99 ↑.
Q-50. London.
Q-51. Istanbul (Mektepini 1956, 438) 16.57.

Group II: *Magistrates*

Series VII: ΑΡΙΣΤΟΒΟΥΛΟΣ; PO lacking.

Q-52. *ANS-BYB (*SNG* 321) 16.87 ↑; Paris 16.31 ↑.
Q-53. London; Paris 17.28 ↑

Series VIII: ΤΙΜΑΙΟΣ; PO lacking.

R-54. *ANS-ETN 17.00 ↑; London.
R-55. Istanbul (Mektepini 1956, 482–486) 16.77, 16.62, 16.70, 16.79, 16.58.
R-56. Istanbul (Mektepini 1956, 487–489) 17.06, 16.87, 16.77. ΤΙΜΑΙΟΣ erased.

Series IX: ΗΦΑΙΣΤΙΩΝ.

S-57. *ANS-ETN 16.63 ↖.
S-58. Beirut Museum.
S-59. Istanbul (Mektepini 1956, 460) 16.47.
T-60. *ANS-BYB (*SNG* 322) 17.24 ↖; London; von Aulock (*SNG* 6647) 17.27.
T-61. Paris 16.91 ↑
T-62. Istanbul (Mektepini 1956, 459) 16.65.
T-*x*. Paris 16.18 ↖.
U-63. *Istanbul (Mektepini 1956, 462) 16.73.
V-64. *Istanbul (Mektepini 1956, 461) 12.11 (plated).
W-65. *Hague 16.90 ↖.
x-x. Istanbul (Mektepini 1956, 463, 464) 16.80, 16.75.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Series X: ΔΑΜΑΤΡΙΟΣ.

T-66. ANS-ETN 16.67 ↖.
T-67. *ANS 16.64 ↖.
T-68. Nussbaum-Ravel 7, 1936; ANS Cast Collection, uncertain provenance.
T-69. de Laval Coll. 17.12 ↖; Cahn 38, December 1968, 44, 17.10.
T-70. Istanbul (Mektepini 1956, 452) 17.10.
T-71. Paris (Mektepini 1956, 455) 16.95 ↖.
T–72. Naville 6, January 1924, 763, 16.94.
T-*x*. Paris 15.70 ↖.
X-73. *ANS-ETN 15.93 ↑; London.
X-74. Paris 17.09 ↑.
X-75. Seyrig Coll.
Y-76. *Paris 16.88 ↖; Florange-Ciani, February 1925, 180, 16.80.
x-x. Istanbul (Mektepini 1956, 453, 454) 16.90, 16.49.

Series XI: ΤΕΙΣΥΛΟΣ.

T-77. *Istanbul (Mektepini 1956, 478) 16.89.
X-78. *ANS 16.72 ↖; von Aulock (*SNG* 6648) 17.13.
Z-79. ANS-ETN (Central Asia Minor 1925) 16.42 ↖; London; W. Giesecke Coll. = Hirsch 13, May 1905, 1119, 16.90 ↖.
Z-80. ANS 16.52 ↖.
Z-81. *ANS-ETN 16.92 ↖.
Z-82. Istanbul (Mektepini 1956, 476) 17.13.
Z-83. Paris 16.55 ↑.
Z-84. Weber 2111, 17.33.
Z-*x*. Paris 16.85 ↑.
AA-85. *London.
BB-86. *Istanbul (Mektepini 1956, 477) 16.94.
x-x. Istanbul (Mektepini 1956, 479–481) 17.07, 17.15, 16.80.

Series XII: ΣΤΑΣΙΩΝ.

T-87. *ANS-ETN 16.73 ↖; Paris.
T-88. ANS-BYB (*SNG* 323) 16.94 ↑.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

U-89. *ANS-ETN 17.12 ↖; Istanbul (Mektepini 1956, 465) 17.03.
X-90. *ANS 16.02 ↖.
X-91. Hague.
X-92. Paris (Baiyada 1949) 16.65 ↑.
X-93. Florange-Ciani, February 1925, 178, 16.40.
X-94. Smithsonian.
X-*x*. Paris 16.80 ↑.
CC-95. *ANS-ETN (Central Asia Minor 1925) 16.80 ↖.
CC-96. Copenhagen (*SNG* 763) 17.02 ↑.
DD-97. *ANS (Propontis 1950) 16.62 ↖.
DD-98. ANS = Basel 10, March 1938, 16.69 ↖; Florange-Ciani, February 1925, 179, 17.00.
DD-99. ANS 16.92 ↖; Paris.
DD-100. Cambridge, Leake 16.87.
DD-101. Vinchon 20, May 1959, 447, 16.55.
DD-102. Istanbul (Mektepini 1956, 466) 17.22.
EE-99. *Schlessinger, February 1935, 737, 17.00.
FF-103. *Istanbul (Mektepini 1956, 467) 12.65 (plated).
GG-104. *Istanbul (Mektepini 1956, 468) 17.05.
HH-105. *Istanbul (Mektepini 1956, 469) 4.70 (plated).
II-106. *London.
x–*x*. Istanbul (Mektepini 1956, 470–474) 16.87, 17.07, 17.10, 17.21, 17.30; Commerce (Mektepini 1956, 475).

Series XIII: AINHTΩP

O-107. *Boston 702, 17.12. AINHTΩP in exergue; rose and PO in l. field.
T-108. *ANS-Storrs 15.12 ↑.
T-109. *Istanbul (Mektepini 1956, 445) 16.68.
X-110. *ANS-ETN 17.00 ↖; von Aulock (*SNG* 6645) 17.02; Yakountchikoff Coll. = Hess, December 1931, 339, 16.70.
X-111. ANS-Storrs 17.22 ↖; London.
X-112. ANS-ETN 15.92 (pierced) ↑.
X-113. Naville 1, April 1921, 935, 17.12.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

X-114. *Commerce.
X-115. Smithsonian.
X-116. Weber 2110, 17.13.
X-117. Paris (Baiyada 1949) 16.32 ↑; London.
X-118. Istanbul (Mektepini 1956, 442) 16.64.
X-119. London
X-*x*. Paris 16.09 ↑
Z-120. *ANS (Propontis 1950) 16.82 ↑.
Z-121. de Laval Coll. = Naville 5, June 1923, 1430 = Ball 6, December 1931, 185 = Hess, February 1934, 237, 17.39; London.
Z-122. Davidson Coll.
Z-123. Copenhagen (*SNG* 762) 16.21 ↑.
Z-124. Istanbul (Mektepini 1956, 444) 17.02.
Z-125. Schlessinger, February 1935, 736, 17.00.
CC-126. *Cambridge (*McClean* 3473), 17.12 ↖.
JJ-127. *ANS = Florange-Ciani, February 1925, 177, 16.95 ↑.
KK-122. *Istanbul (Mektepini 1956, 443) 16.54.
x-x. Istanbul (Mektepini 1956, 446–451) 17.33, 16.95, 16.37, 16.87, 16.53, 16.88.

Series XIV: ΔΑΜΟΚΡΙΝΗΣ

U-128. *ANS-ETN 16.73 ↖.
U-129. Paris (Latakia 1956) 16.61 ↖.
X-130. *ANS-ETN 16.72 ↖.
X-131. Paris 17.06 ↖.
X-132. Brussels, (*de Hirsch* 1077), 17.14 ↖.
X-133. Egger 5, May 1912, 659, 17.11.
X-134. von Aulock (*SNG* 6646) 17.11.
x-x. London.

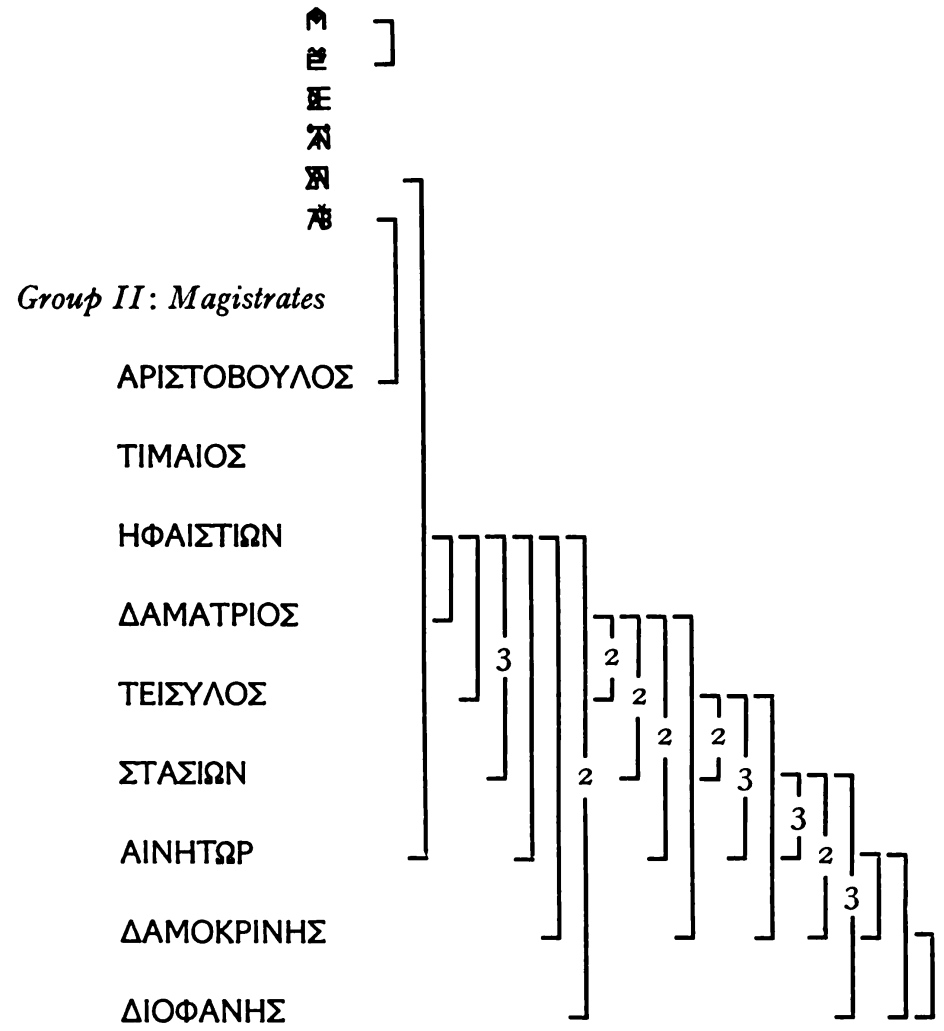
Series XV: ΔΙΟΦΑΝΗΣ

S-135. *Beirut Museum.
S-136. London.
U-137. London.
U-138. *ANS-Storrs 17.13 ↑; Oxford-Storrs 16.67 ↑.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

CC-139. *ANS 16.42 ↖.
CC-140. Paris (Mektepini 1956, 459) 17.03 ↖.
CC-141. Istanbul (Mektepini 1956, 457) 16.90.
II-142. *Istanbul (Mektepini 1956, 456) 17.10.

SEQUENCE OF ISSUES



The Alexanders minted at Rhodes, unlike those of Pergamum, present little difficulty in terms of identification. On all specimens

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the Rhodian rose adorns the left field of the reverse; and the ethnic, PO, is usually also present, under the throne or in the left field. The Rhodian Alexanders, as the Pergamene issues, may be divided into two groups for classification purposes. In both cases, however, this is more an arbitrary than a strictly chronological division, for there are die links between the two groups.

The Rhodian series begin with what might be called experimental strikings in terms of the placement of symbols and monograms, and the presence or absence of borders. The first two series are struck from a single obverse die (A) and conform to the same pattern. The obverse die has no borders, but all the reverses have a border of dots. The rose and PO are both in the left field, and the monogram appears under the throne. Series I bears the mark ; Series II, .

It had been suggested as early as 1864, by Churchill Babington, that two of the Rhodian monograms could be identified with a magistrate's name on the Group II issues.[28] But it was Peter Way[29] who first recognized that every one of the Group I monograms could be identified with a magistrate whose name appeared on either the later Alexanders or the autonomous Rhodian coinage. is certainly to be identified with ΤΙΜΑΙΟΣ and most probably with ΕΥΚΡΑΤΗΣ. The latter name appears only on the autonomous issues.[30]

Series III documents an adjustment in the Alexander *schema* at Rhodes. As in the first two series, the obverse dies (B–G) have no borders, although the reverses continue to be framed by a ring of dots. But the positions of the markings have been interchanged. The ethnic is now situated under the throne, and the monogram, , which can be identified with the magistrate ΤΕΙΣΥΛΟΣ, has been moved to the left field.

With Series IV, the pattern is set for the remainder of the Alexander coinage, although two minor deviations occur in three later series. The obverse (H–K), as well as the reverse, dies are now bordered by a ring of dots. The PO remains under the throne and the rose and monogram are in the left field. The magistrate's mark in

[28] Babington p. 1, p. 2, note 4 (= ΑΙΝΗΤΩΡ and = ΣΤΑΣΙΩΝ).
[29] In an unpublished seminar paper on file at the American Numismatic Society.
[30] *BMCCaria* nos. 124, 125, 141, 175, 176, 194, and 196.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

this series, ⊼, can be associated with the name AINHTΩP, which appears later.

Series V conforms to the new Rhodian *schema* and bears the monogram ⊠,[31] which can be interpreted as ΣTAΣIΩN, a Rhodian magistrate whose full name appears on the Alexanders and the autonomous coinage, as do those of TEIΣYΛOΣ and AINHTΩP.[32] One obverse die used in this series (O) can be linked to a unique reverse (107) in Group II which has AINHTΩP in full in the exergue—the only instance in the Rhodian series of a magistrate's name in that position.

Series VI, the last of the monogram issues, shares an obverse die (Q) with the first series of Group II. The former series bears the monogram ⊼, which might possibly be an abbreviation for APIΣTOBOYΛOΣ, whose full name appears on Series VII. On the latter series, unlike Series VI, the PO is lacking, but this detail is of no significance for attribution because of the presence of the rose, the linkage of dies, and the occurrence of the name on the autonomous issues.[33]

The PO is also lacking on Series VIII which bears the name TIMAIOΣ in addition to the rose in the left field of the reverse. The ethnic reappears, under the throne, on Series IX. The magistrate's name on this issue is HΦAIΣTIΩN, but there is no corresponding monogram in Group I.

With this series, the Rhodian *schema* becomes fixed,[34] and a complex pattern of die linkage begins which associates every one of the remaining magistrates with at least three, and as many as six, of his colleagues. In some instances, authorities are linked by two or three obverse dies. This is the case with HΦAIΣTIΩN, and it is clear that

[31] Müller 1155 and 1157 are either variants or misreadings of this series.

[32] *BMCCaria* nos. 149, 182, 183, 207, 284, and 285 (ΣTAΣIΩN); 186 (TEIΣYΛOΣ); 153–161, 244 (AINHTΩP).

[33] The ethnic is sometimes omitted on the autonomous issues. In the 1902 Oreus hoard, containing 595 Rhodian drachms, the PO is missing in several pieces, including two bearing the name AINHTΩP (158/9) and two with ΣTAΣIΩN (524/5). S. P. Noe, *A Bibliography of Greek Coin Hoards*, *ANSNNM* 78 (1937), no. 771. J. N. Svoronos, *JIAN* 5 (1902), pp. 318ff., pl. XI. For APIΣTOBOYΛOΣ on the autonomous drachms, see *BMCCaria* nos. 137, 138, and 250. R. Ashton questions the reading of ⊼ as APIΣTOBOYΛOΣ.

[34] With the exception of O–107.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

any ordering of the remaining series is purely arbitrary. These issues seem to have been produced concurrently from a common pool of dies. Thus die T was used in Series IX, X, XI, XII, and XIII—i.e., for ΗΦΑΙΣΤΙΩΝ, ΔΑΜΑΤΡΙΟΣ, ΤΕΙΣΥΛΟΣ, ΣΤΑΣΙΩΝ, and ΑΙΝΗΤΩΡ. Die U was used for ΗΦΑΙΣΤΙΩΝ, ΣΤΑΣΙΩΝ, ΔΑΜΟΚΡΙΝΗΣ, and ΔΙΟΦΑΝΗΣ; die X for ΔΑΜΑΤΡΙΟΣ, ΤΕΙΣΥΛΟΣ, ΣΤΑΣΙΩΝ, ΑΙΝΗΤΩΡ, and ΔΑΜΟΚΡΙΝΗΣ.

This indication of contemporaneity is fortified by the record of worn and broken dies, which are frequent on the Rhodian coins[35] but never occur at the Pergamene mint. Die X, for example, was in fine condition when used for ΑΙΝΗΤΩΡ (X-110); showed signs of wear, particularly at the back of the head, when struck for ΤΕΙΣΥΛΟΣ (X-78); was returned to ΑΙΝΗΤΩΡ when it had broken down still further (X-114); and was ultimately employed by ΣΤΑΣΙΩΝ, when the die was worn almost beyond recognition (X-90). Contrasting patterns are detectable for dies S, T and U. S was in good condition when used for ΗΦΑΙΣΤΙΩΝ (S-57); but when struck for ΔΙΟΦΑΝΗΣ, cracks had appeared in the right field before the forehead and nose. T was in fine condition when used for ΗΦΑΙΣΤΙΩΝ (T-60); but was cracked on the cheek and before the nose when struck for ΣΤΑΣΙΩΝ (T-87); and further damaged when used for ΤΕΙΣΥΛΟΣ (T-77). U, however, was in good condition when employed for ΣΤΑΣΙΩΝ (U-89) and ΔΙΟΦΑΝΗΣ (U-138); but worn when struck later for ΗΦΑΙΣΤΙΩΝ (U-63).

With Series IX through XV being more or less contemporary, and there being other linkage among the first six series, as well as between groups I and II,[36] the Rhodian Alexanders, as those of Pergamum, were most likely struck in a period spanning little more than a decade. Hoard evidence indicates precisely which decade this was.

HOARDS

A terminus ante quem for both the Pergamene and Rhodian Alexanders is furnished by the 1956 Mektepini hoard, which contains

[35] See especially X–90. The reverse of this piece is in nearly mint condition but the obverse was struck from a die so worn that it is almost illegible.
[36] O–46 and O–107; Q–47 and Q–52.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the latest series of each mint. Seyrig dated the burial to 190–180 B.C. on the basis of dated issues in the hoard, and the absence of other pieces from nearby mints struck in the years shortly after 188.[37] The latest incontestably datable coin is a tetradrachm of Aradus minted in 196/195 which is in excellent condition. Well-preserved Pergamene regnal tetradrachms of Westermark's Group VI,b are also present, but examples of her Group VII are conspicuously absent.

The hoard contains thirteen Pergamene and sixty-three Rhodian Alexanders, all in very fine to excellent condition. It is extremely unlikely that any of these coins were in circulation for much more than a decade, which confirms the evidence for a rapid sequence of issues revealed by the die study. The order of emission at both mints, as indicated by the linkage, is also supported by the relative scarcity of the Group I series: one Pergamene example, as opposed to twelve Group II pieces; and fifteen Rhodian Group I coins, in contrast to forty-eight Group II specimens. Since the third Pergamene and Rhodian series are both represented in the hoard, a beginning date in the last years of the third century would be appropriate for the Alexanders of each mint.

The date of the Mektepini find facilitates the analysis of two other hoards buried around 190 B.C.:[38] the Ayaz In and Adramyteum hoards, to be published by Seyrig. The Pergamene coins contained in these burials are all in excellent condition, and represent the eighth, ninth, and last (sixteenth) Alexander series—all Group II issues.

Several other hoards containing Pergamene and Rhodian coins which were buried after 190–188, or which cannot be securely dated, are of no value for precisely dating the Alexanders, but are of some interest as documents of the distribution of these issues. The hoards in question are those discovered in Rumania in 1937, at Tortose in 1940, at Baiyada in 1949, at Latakia in 1956, in the Propontis in 1950, and that brought back from Central Asia Minor in January 1925.

[37] *Mektepini*, pp. 29ff.
[38] This is the date suggested by Seyrig in his hoard notes and in "Monnaies hellenistiques VIII. Pergé," *RN* 1963, p. 42.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A hoard buried somewhere in Asia Minor, and on the market in 1929, is also of little significance for dating purposes, but of topographical significance. It is apparently a "collector's hoard" containing coins assembled over a long period of time, all in superb condition. Included in its contents is a Philetaerus tetradrachm of Group II, dated by Westermark to 262-241 B.C.[39] The predominant representation of Pergamene issues in the hoard suggests the geographical area in which the treasure was accumulated over the years.

The indication of the Mektepini hoard, that the Alexander series of Pergamum and Rhodes begin at the close of the third century, is confirmed by the 1951 Gordion hoard. The date of burial of this find was originally placed by Cox at 210 B.C., on the basis of tetradrachms of Antiochus III dated by Newell 215–205, and a dated coin of Aradus, struck in the year 218/217.[40] Seyrig, however, urged a revision of the dating to ca. 205 on the basis of the Pamphylian specimens in the hoard,[41] and his suggestion was subsequently accepted by Cox.[42] There is, however, a previously unrecognized Pergamene Alexander in the hoard (no. 13) which necessitates a second revision of the burial date. This specimen is in finer condition than any of the latest datable coins, and since the pieces in this hoard are not a gradual accumulation of fresh strikings, but were circulated, and buried at one time, the lack of wear is significant. Furthermore, there are other Alexanders in the hoard which are in superb condition and, as yet, imprecisely dated. The Gordion treasure was probably buried around 200, to judge from the wear on the coins dated between 218 and 205, and the presence of less circulated pieces.

Since the Pergamene Alexander in this hoard is from the second series of that mint, and the Rhodian and Pergamene strikings are clearly contemporary, the first issues of Alexanders at both cities should be placed about 202 B.C. The evidence of the Gordion and Mektepini hoards would thus seem to indicate a time span for both coinages of ca. 202–188 B.C.

[39] Westermark VI–2; Naville 15, 1930, 915.
[40] *Gordion*, pp. 16ff.
[41] H. Seyrig, *RN* 1963, pp. 38ff.
[42] D. H. Cox, "Gordion Hoards III, IV, V and VII," *ANSMN* 12 (1966), pp. 35f.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

HISTORICAL BACKGROUND

In Westermark's Pergamene sequence, the Philetaerus types continue to be issued until their replacement by cistophors, and there is good reason to believe that this is the case.[43] Issues from regnal group VII, however, have no parallels in the Alexander series and are clearly subsequent to them—i.e., the Alexanders are discontinued, while the Philetaerus types of similar denomination continue to be struck under Eumenes II until the cistophors replace them. The Alexanders must be seen as a temporary currency begun in the last years of Attalus I, carried on for about eight years by Eumenes II, and then suddenly abandoned.

The Rhodian Alexanders are also datable in this period and are contemporary with the state's autonomous issues, which bear the same magistrates' names. Both Alexander coinages were obviously struck for a specific purpose. The record the ancient historians have left us strongly suggests just what the purpose was.[44] In 205 B.C., Rome made peace with a defeated Philip V of Macedon. It was not to be a long-lived peace, however, but a mere interlude between two great conflicts which turned all of Greece and Asia Minor into a huge battlefield.

In 204, Ptolemy Philopator died, leaving Egypt to his six-year-old son, Ptolemy Epiphanes. Without a strong leader, Egypt's influence in Asia Minor was impaired, and Philip saw in the situation an opportunity to rebuild his power at the expense of the Ptolemaic possessions. Philip, however, was not the only monarch who coveted the young ruler's domain; Antiochus III of Syria also had designs for the extension of his power. Thus, in 203, to avoid contending with each other, Philip and Antiochus entered into a pact which arranged for the division of Ptolemy's territory.

[43] Westermark, pp. 18f. S. P. Noe's unpublished notes on the early cistophoric coinage of Pergamum state: "It would not be too much to expect to find the first among the *cistophoroi* having some relation to the last of the regal coins, and that is just what we find. For there is common to both the letters ΑΣ enclosed in a square. Now such enclosure in a square, whatever its significance, does not recur in either series."

[44] The following historical account is based on Polybius 15–21; Livy 27–37; Justin-Trogus 30–32; Appian, *Mac.* and *Syr.*; Zonaras-Dio 9; Plutarch, *Flam.* and *Phil.*; Florus 1, 23–24; and Diodorus Siculus 27–29. Other sources and direct quotations are referred to in the notes.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In 202, Philip launched the first attack in his struggle to gain political and economic control of the Propontis, Hellespont, and Bosporus. From his base in Macedon, he proceeded to Lysimacheia, a city allied with Aetolia, seized it, and placed it under garrison. Calchedon, an important city on the trade route between European Greece and the Black Sea, was the next to fall to Philip. The garrisoning of Calchedon was also of strategic importance in establishing a chain of friendly cities between Macedonia and Prusias I of Bithynia. Then, putting in at Cius, another city known to be on friendly terms with Aetolia, Philip joined forces with Prusias, and besieged the town. If Aetolia was not already aroused by Philip's actions at Lysimacheia and Calchedon, the seizure of Cius was a direct affront. Although there was an Aetolian officer governing Cius, the Macedonian king sold its populace into slavery, and carried away all objects of value. The "bare site of a city"[45] was given to Prusias, who rebuilt it and changed its name to Prusa.[46] Presumably at this time, Perinthus, a city allied with Byzantium, was also taken.

On his return voyage, Philip docked at the island-state of Thasos, and sent his general, Metrodorus, to arrange terms of surrender with the inhabitants. Metrodorus was received by the Thasians, who stated that they would surrender their city if Philip would continue to let them live under their own laws, and guarantee them freedom from tribute, garrison, and the quartering of soldiers. Metrodorus agreed to the terms and Philip was admitted to the city, whereupon his army seized and enslaved the populace.

The next year, 201, Philip again moved his fleet along the coast of Asia Minor. His target this time was the Ptolemaic fleet stationed at Samos. After capturing the Egyptian unit and occupying the island, Philip set sail for Chios, an ally of Rhodes. Although he besieged the city with his troops, he was unable to take it and since a large Greek fleet was forming and threatened to trap him in the harbor, Philip elected to escape, hoping to catch the enemy unprepared. Slipping out of the harbor, the king hastened toward Samos, but was overtaken by the allied navy. Philip's force of one hundred fifty galleys and beaked ships, as well as fifty-three undecked vessels,

[45] Polyb. 15.23.10.
[46] Strabo 12.4.3.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

was no match for the maneuverability of the sixty-five decked ships and lighter vessels of Rhodes, Pergamum, and Byzantium. The Pergamene fleet, jointly commanded by Attalus, Dionysodorus, and Deinocrates, and that of Rhodes under Theophiliscus, inflicted heavy losses upon Philip. Although he made a pretense of claiming victory, it was a defeated fleet that the Macedonian king anchored at Argennum. The next day, when the allied fleet sailed out to engage him, Philip remained safely in the harbor, not wishing to risk further humiliation.

The extraordinary character of the Pergamene-Rhodian alliance of 201 has been commented upon by others,[47] but it merits full duscussion here, as it probably gave rise to the Alexander coinage of both states.

In Philip's invasion of Asia Minor in 202, the Macedonian king had carefully avoided hostilities with cities allied to either Pergamum or Rhodes, confining his agressive policy to Aetolian and Byzantine cities, hoping to keep Attalus and the Rhodians out of the conflict. As late as the siege of Cius, Philip was still trying to preserve the neutrality of Rhodes, by sending ambassadors to that state to speak of his "magnanimity" and of his concessions to the wishes of the Rhodians, regarding the safety of the Cians.[48]

But Philip had miscalculated the ability and willingness of Rhodes and Pergamum to join forces in defense of Greek Asia Minor. Indeed, nothing in the history of the two states would have warranted any other conclusion on Philip's part. In 224, an earthquake overthrew the Colossus of Rhodes, and severely damaged the walls and docks of the city's harbor, upon which the extensive commercial power of

[47] In my commentary upon the ancient sources, I have consulted numerous secondary sources, the most important of which are M. Holleaux, *Rome, la Grèce, et les monarchies hellénistiques au IIIe siècle* (Paris, 1921); Holleaux, "L'expédition de Philippe V en Asie en 201," *Revue des Études Anciennes* 22 (1920), pp. 77ff., 237ff.; 23 (1921), pp. 181ff.; 25 (1923), pp. 330ff.; C. Starr, Jr., "Rhodes and Pergamum, 201–200 B.C.," *Classical Philology* 33 (1938), pp. 63ff.; F. Walbank, *Philip V of Macedon* (Cambridge, 1940); E. Hansen, *The Attalids of Pergamon* (Ithaca, 1947); P. Fraser and G. Bean, *The Rhodian Peraea and Islands* (Oxford, 1954); and R. McShane, *The Foreign Policy of the Attalids of Pergamum* (Urbana, Univ. of Ill., 1964) with bibliography to date.

[48] Polyb. 15.23.2.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rhodes was dependent. Ptolemy, Antigonus, Seleucus, Prusias, and Mithridates, as well as Hieron and Gelon of Syracuse, and some lesser rulers, contributed large sums of money and materials toward the rebuilding of the port.[49] However, the names of Attalus, or of any of the allies of Pergamum, are conspicuously missing from the ancient accounts.

In 220, Byzantium, a city in a position to control the passage of ships into and from the Black Sea, elected to impose a levy upon vessels sailing into the Pontus. According to Polybius, the dues were to be collected to meet a yearly tribute of eighty talents recently exacted from the Byzantines by the Gauls. The Rhodians, who stood to lose the most from the new arrangement, led an embassy to Byzantium, demanding the abolition of the tariff. The Byzantines refused and Rhodes declared war. In the alignment of allies on each side, Prusias took the side of Rhodes, and Attalus that of Byzantium. Only the weakened position of Pergamum at this time prevented open conflict with Rhodes.[50]

Rhodes was also generally suspicious of Attalus' intentions in Greece. These suspicions came to the forefront during the First Macedonian War, in which Rhodes persistently remained neutral. In 209, for example, envoys of Rhodes, Chios, Athens and Egypt were present at Phalara, attempting to mediate between Macedon and the Aetolian League. Livy tells us that the neutrals sought an end to the war in order that neither Rome nor Pergamum would have any excuse for entering Greece.[51]

In this light, the cooperation of Pergamum and Rhodes in 201 is remarkable. The threat of a common enemy seems to have temporarily outweighed their long-standing antagonism. Both powers, of course, had ample reason to be disturbed by Philip's actions. Pergamum was an ally of Aetolia and Byzantium, and was always opposed to the territorial expansion of Prusias. With Philip's invasion of Asia Minor, and the increasing proximity of his troops to the cities of the Troad, Pergamum was certain to offer resistance. Rhodes, understandably aroused at the new threat to Pontic com-

[49] Polyb. 5.88.1–90.4; Just.-Trog. 30.4; Dio. Sic. 26.8.1.
[50] Polyb. 4.46.1–6, 47.1–7, 48.1–2.
[51] Livy 27.30.4–5, 30.10; Appian, *Mac.* 3.1.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

merce, was already ill-disposed toward Philip because of his interference in Crete in 205/204. Rhodes had declared war on the Cretans as a result of the latter's piracy, which was disrupting commerce by sea. Philip had supplied twenty ships to Dicaearchus of Aetolia, urging him likewise to engage in piracy and to support the Cretans in their war against the Rhodians.[52] Philip's actions of 202 (especially his sack of Cius and enslavement of its citizens, while his ambassador at Rhodes was promising fair and humane treatment of the Cians) were regarded by Rhodes as grounds for war.

Nevertheless, however independently incited Pergamum and Rhodes were, the creation of an alliance seems to have been attained only with difficulty, and largely through the efforts of one man. Polybius tells us that it was the Rhodian admiral Theophiliscus who forced his countrymen to move against Philip, and who compelled Attalus to cut short his preparations for war, and combine his fleet with that of Rhodes at Chios. For these services, the Rhodians were to accord him special honors after his death.[53]

It is at this juncture, 202/201 that I would place the beginning of the Alexander coinage of Pergamum and Rhodes, a series of issues probably used to pay the fleet, and bearing the types that had long been acceptable all over the Hellenistic world. The same was not necessarily true of the Pergamene issues bearing the head of Philetaerus; nor of the autonomous Rhodian issues displaying the head of its Colossus on the obverse. Since the minting of Alexanders by Rhodes also necessitated a change of standard from that of its local currency to the Attic, the inevitable conclusion is that the coinage struck by the two states was jointly conceived in order to facilitate the exchange of funds among the squadrons represented in the allied fleet and army.

The Second Macedonian War lasted until 197/196, when Philip was decisively defeated at Cynoscephalae by the combined forces of Pergamum, Rhodes, and Rome, the latter having finally declared war on Philip in 200. The cooperation of these three powers, and their joint actions at critical junctures, are well attested in the ancient sources.

[52] Polyb. 13.4.1–2; Dio. Sic. 27.3.1, 28.1.1.
[53] Polyb. 16.9.1–5.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The end of this war, despite the specific terms of the treaty, did not bring peace to the Mediterranean, and the alliance again took up arms in 195, this time against Nabis of Sparta. Already suspecting trouble, Rome had extended the authority of Flamininus for a year, with the command of two legions, and the option of declaring war on the Senate's behalf. Concerned about Nabis' seizure of Argos, of strategic importance for control of the Peloponnese, Flamininus called a council at Corinth. War was declared on behalf of Rome and the Greeks, each Greek state sending whatever auxiliaries were available. An allied fleet was reassembled, Rome contributing forty ships, the Rhodians eighteen decked vessels, and Eumenes II ten warships, thirty cruisers, and additional smaller craft. Since Nabis' garrisons were no match for the Greek and Roman land forces and the allied fleet, Argos and Gythium, the Spartan naval arsenal, fell before the end of the year. Defeated on land and cut off from the sea, Nabis retired to Sparta, where, after suffering the allied siege, peace was arranged, and the Pergamene, Rhodian, and Roman fleets were dispersed.

The third, and the most potent monarch who presented a threat to the cities of Asia Minor during this period, was Antiochus III of Syria. Antiochus, under the pretense of reoccupying the possessions of Seleucus (which he considered his legitimate inheritance) and of defending the autonomy of the Greek cities, was systematically carrying out a plan to dominate the entire Hellenistic world.

In the summer of 198, before wintering at Antioch, Antiochus had taken over all the cities of Coelesyria which had been subject to Ptolemy. Then, in 197, he captured Ephesus, a city strategically situated for land and sea raids into Ionia and the Hellespont. Sardis, and other states along the coast of Asia Minor from Cilicia to the Hellespont, subsequently came under his control. Rhodes, though still involved in the war against Philip, immediately responded to the Syrian aggression. Ambassadors were sent with an ultimatum to Antiochus, who was currently beseiging Coracesium. If Antiochus were to move beyond Chelidonae, a promontory in Cilicia, he could count on armed resistance from the Rhodians. We are also informed by Livy that the Rhodians sent aid to the Greek cities, in the form of reinforcements or intelligence regarding the enemy's plans, and

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

it was because of their efforts that Caunus, Myndus, Halicarnassus and Samos remained beyond Antiochus' grasp.[54]

Rome, too, was aroused by Antiochus' actions and sent instructions to the king through his ambassadors. Antiochus was ordered to withdraw from the Ptolemaic cities of Asia Minor, to refrain from seizing any nearby cities, and to keep his troops out of Greece.

Antiochus disregarded the warning, and in 196 sent his armies from Ephesus to Smyrna, and from Abydus to Lampsacus. A little later in the spring, Antiochus himself left Ephesus with his navy, and sailed to Madytus in the Chersonesus, where he was joined by the remaining land forces stationed at Abydus. Madytus, Sestus, and other neighboring cities surrendered, and Antiochus proceeded to Lysimacheia. Finding it in ruins and abandoned after the Thracian raids, he rebuilt and resettled it, to some extent with Lysimacheians he had ransomed from slavery. Rome again sent an embassy to Antiochus, protesting his presence in Thrace, but delayed declaring war until 191, when the Syrian king had crossed into Greece with the encouragement of the Aetolians, and with their aid seized the key port of Chalcis.

The old Roman-Pergamene-Rhodian alliance was revived, and late in the autumn of 191, the allied navy, in its first joint engagement, defeated an enemy fleet at Erythrae. In 190 at Magnesia the Roman army, with the decisive aid of Eumenes, completely defeated Antiochus, who was forced to sue for peace on any terms.

The subsequent ratification of the peace in Rome in 189 is of particular interest, for in the full accounts of the speeches of the embassies that the ancient historians have left us,[55] the antagonism of Rhodes and Pergamum comes to the surface again. The reemergence of hostility between the two Greek powers requires some discussion, for 189/188 is the date at which the Alexander coinage of both cities is discontinued.

In Rome, Marcus Aurelius Cotta, speaking on behalf of Lucius Scipio, set forth the events of the war with Antiochus, for which thanksgiving and sacrifices were voted. Then Eumenes was granted an audience by the Senate. He began with praise and thanks for the

[54] Livy 33.20.12.
[55] Polyb. 21.18.1–24.17; Livy 37.52.1–56.10; Dio. Sic. 29.11.1.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Roman role in the salvation of his kingdom and the expulsion of Antiochus from Greece and Asia Minor. Feigning modesty, he repeatedly refused to recount his services in the war or state what he considered a just reward for his loyalty, until the Senate granted him a private audience. Then Eumenes began to plead his case, saying that he would have continued to keep his silence if it were not that the Rhodians were to speak next. The Rhodians, he said, would claim to plead the cause of freedom for the other Greek states, but that this would only be a cleverly disguised ruse to further their own ends. For if the Romans were to free those cities previously paying tribute to Pergamum, they would be destroying their most trusted ally, while in no way advancing the cause of the cities. These states would subsequently become subject to Rhodes, to which they owed their "freedom." Then Eumenes reminded the Romans of the services his father had rendered them up to the moment of his death, and of the perils he himself had risked on their behalf. Citing the precedents of Rome's generosity to Masinissa in Africa, and to Pleuratus in Illyria, he nevertheless asked nothing more than for Rome to occupy the territory taken from Antiochus, and remain his friend and ally. But if Rome elected to withdraw from Asia Minor, no one of its allies would be more worthy to receive the land than Pergamum.

When the Rhodians were called in, they pleaded for the freedom of the Greek cities of Asia Minor, as Eumenes had predicted. Rome, they said, could make Eumenes equal to the greatest of kings, and still preserve for these states the freedom for which the Romans claimed to have fought. Lycaonia, Phrygia, Pisidia, and the Chersonesus would be ample payment for the Pergamene king's services. After all, Rome had denied to Philip and Antiochus the right to have dominion over the Greeks of Asia Minor, thinking on those occasions that the "freedom of the Greeks" included the Ionians as well as those of the mainland. If some of these cities had sided with Antiochus or Philip, they should be forgiven—even Carthage was at present free and living under its own laws.

But the Rhodians were unconvincing, and in the final terms of the treaty written at Apamea, Eumenes received all of Antiochus' possessions on his side of the Taurus mountains, except for Lycia

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

and Caria, which went to Rhodes; and all of the states which had paid tribute to Attalus were to continue to be tributaries to Eumenes; while only those cities of Asia which were formerly enslaved to Antiochus would be set free. The Rhodians, understandably bitter, returned home, their suspicions of Eumenes having been confirmed. Pergamum's desire was never Greek autonomy, but imperialist expansion.

With the common enemy removed, the latent hostility between the two states became evident again. In 182, after Pharnaces of Pontus had seized Sinope and Heraclea, Rhodes prevented a Pergamene fleet from blockading the Hellespont.[56] Although in 180 Eumenes sent aid to Rhodes in its attempt to control the Lycian cities,[57] in 174 the Rhodians accused Pergamum of inciting revolt against Rhodes in Lycia.[58] By 172 Rhodes' anti-Pergamene sentiment was strong enough for Rhodian envoys at Rome to denounce Eumenes as much more oppressive to the Greeks of Asia than Antiochus had been.[59]

The issuance of Alexander types by Pergamum and Rhodes, begun in 202/201 and suspended in 189/188, seems to have been directly dependent on the existence of a brief Attalid-Rhodian alliance. The coins at one time reflect, and augment, the picture of Greek affairs that the ancients have left us.[60]

[56] Polyb. 23.9.3, 27.7.5; Livy 40.2.6–7.
[57] Polyb. 24.15.13.
[58] Polyb. 27.7.6; Livy 42.14.8.
[59] Livy 42.14.8; Appian, *Mac.* 11.2–3.
[60] After this article went to press, a private collector in New York City kindly showed me a Rhodian tetradrachm in his possession which documents an additional case of die linkage: obverse die S paired with ΣΤΑΣΙΩΝ. The obverse die shows signs of wear not visible when the die was used for ΗΦΑΙΣΤΙΩΝ.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

SOME NUMISMATIC PROBLEMS IN THE DELIAN INSCRIPTIONS[1]

J. R. JONES

The references to coins which appear in the records of the treasures held in the sanctuary of Apollo on Delos were first studied briefly by Homolle in his publication of the inventory of Demares,[2] and this inspired a more detailed commentary in the following year by P. Gardner.[3] These and a few other texts and inscriptions formed the basis of the survey of the names of Greek coins which was included by E. Babelon in the first volume of his *Traité*, although many problems still remained unsolved. L. Robert in his *Études de numismatique grecque*[4] has since that time disposed of a great number of the remaining difficulties, and it is the purpose of these notes to point out some of those which are left.[5]

"Eleven Aeginetan and Cretan Staters"

This entry appears six times in all for dates between 279 and 262 B.C.,[6] and is puzzling for two reasons. Firstly, it is not usual in these inscriptions to find coins from more than one mint grouped together: a more normal entry would have been "six Aeginetan staters and five Cretan staters," or whatever other combination of figures would be necessary to make up the number eleven. Secondly,

[1] I am greatly indebted to Dr. C. M. Kraay and Dr. M. Jessop Price for helpful comments made on the material from which these notes are drawn.

[2] Th. Homolle, "Comptes des Hiéropes du Temple d'Apollon Délien," *BCH* 1882, pp. 131–133.

[3] "Votive Coins in Delian Inscriptions," *JHS* 1883, pp. 243–247.

[4] Paris, 1951. Of the essays contained in this work, the following refer to coins mentioned in the Delian inscriptions: III. "Les drachmes du Stéphanéphore à Athènes" (pp. 105–135); VI. "Quelques monnaies dans les inventaires de Délos athénienne" (pp. 143–178); VII. "La circulation des monnaies d'Histiée" (pp. 179–216).

[5] References to the inscriptions are by number alone when they have been published in *IG* XI, part 2 (nos. 1–289), or by Durrbach and Roussel, *Inscriptions de Délos* (nos. 290–1399 in vol. I; nos. 1400 onward in vol. II).

[6] αἰγινᾶται καὶ κρητικοὶ στατῆρες ἕνδεκα in 161 B 20, 162 B 16, 164 A 62–3, 199 B 44, 203 B 70, 223 B 29.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

what are these Cretan staters? No other coins are referred to in this way, with a name denoting the general area from which they came, rather than the individual mint.[7] In one inscription two coins are described as "Cretan" when it is clear from comparisons with other inscriptions in which the same list occurs that they were actually Corinthian,[8] but this is not likely to be the explanation here.

Two possibilities are open: they may have been coins of several Cretan states, all on the same weight standard, which were lumped together for reasons of convenience instead of being listed separately; or they were coins of one of the Cretan mints which were labelled in this instance as being "Cretan" instead of "Gortynian" or "Cnossian" as the case might be. The first suggestion is made less likely by the fact that nothing of this sort seems to have happened elsewhere in the inventories, and the second more probable by the existence of a parallel example: the term "Euboic" is used in 1432 Bb I 31 to describe coins which in a later inventory, 1449 Ba I 44, turn out to have been of Histiaea.

A drachm of Apollonia

This coin appears in two inscriptions ca. 145 B.C.[9] Of the nine cities of this name which minted coins, most can be rejected at once, because they issued only bronze, or did not strike until after this date.[10] We are then left with Apollonia Pontica on the Euxine coast of Thrace and Illyrian Apollonia, the colony of Corcyra. The first of these might seem a likely choice, as it would not be surprising to find coins travelling from the Black Sea to the Cyclades, but in the Hellenistic period it does not seem to have struck in silver. Apollonia Illyrici is therefore the most likely source of this coin, which will be one of those issued during the late third and second centuries B.C. on the weight standard of the Roman victoriate.

[7] See also note 13 below. An exception to this would, of course, be the coins issued by the various leagues. But there was no Cretan Koinon before the time of the Roman Empire.

[8] 164 A 63. When this passage is repeated elsewhere, the coins are described as Corinthian.

[9] δραχμὴ ἀπολλωνιατική in 1422 line 14, 1449 Ba I 108.

[10] For one or another of these reasons we reject Apollonia Macedoniae, Cretae, Mysiae (ad Rhyndacum), Lydiae, Lyciae, Pisidiae (Mordiaeum) and Cariae (Salbacc).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

"Arbulic obols"

Two of these appear in a series of inscriptions between 282 and 260 B.C.[11] There is, unfortunately, no coin with a boot or ἀρβύλη as its type, and even if there were, it is not very likely that this word would have referred to it, since it would then have been called ἀρβυλοφόρος, not ἀρβυλικός. There is no Hellenistic ruler with such a name, or anything resembling it, so the most likely solution to the problem is that the name of some Greek city lies buried in the word. Here the clue is surely given by the variant spelling ἀγρολικός which appears in the fifth inscription; so let us make one small further change to ἀργολικός, and give the coins to Argos, putting this down as a blunder, no doubt originally committed in writing on some ticket or list which has perished, and then stubbornly perpetuated in stone.

It may be objected that Ἀργεῖος, not Ἀργολικός is the normal word; but in these inscriptions the ending -ικος is common when coins are described by the names of the cities which issued them, and in Attic inscriptions we find the latter form on two occasions, the first being a broken passage where it is even possible that there might have been a reference to coins.[12]

A Carian drachm?

In an inscription dated shortly after 156 B.C. the editors have read a worn line in such a way that it appears to record the presence of a Carian drachm.[13] This is most unlikely, and it would probably be better to write π̣ᾳ̣ῤ̣ι̣[α], which appears elsewhere.[14]

Chian drachms

Drachms of Chios are recorded in a number of inventories.[15] The numismatic interest of these entries lies in the fact that the earliest

[11] ἀρβυλικοὺς ὀβολοὺς δύο in 158 A 6, 161 line 80, 164 A 23, 175 d 1, 199 B 19 (ἀγρολικούς), 203 B 47, 219 B 55.
[12] *IG* II² 1414, line 46; 1425, line 359.
[13] 1428 II 79, κ̣ᾳ̣ῤ̣ι̣ [α]. No coins were ever issued by Caria as a whole (ἀργυρίο καρίο in *IG* I² 186 and 187 refers to coinage of the Icarians).
[14] 203 B 23; also restored in 204 line 5. Not a certain restoration in the latter case, but better than πάφιον, which is the only alternative.
[15] Two drachms in 367 line 17, 396 Ba 78, 442 B 190, 443 Bb 115, 444 B 33. A single drachm in 1422 line 6, 1429 B II 21, 1450 A 206.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

inscription in which they are mentioned may be as early as 207 B.C., while the next is certainly of 194 B.C. It is possible that they were coins of the fourth century which had survived in circulation; but if not, it may be necessary to date some of the city's Hellenistic coinage rather earlier than it is customary to do at the moment.

Coinage of Histiaea

By combining broken passages which survive in two inscriptions, it is possible to reconstruct an equation in which a sum of money from an unidentified mint, together with one coin of Histiaea, is valued in terms of Attic currency: ...] ṗṛaιδιας 195 καὶ ἱστιαϊκόν, ὃ γίνεται εἰς ἀττικοῦ λόγον 130 dr. 3 obols.[16]]ṗṛaιδιας seems unlikely, and perhaps we should read κνιδίας. At any rate, it seems clear that the coins which made up the bulk of this deposit must have exchanged with Attic in a ratio of 3:2. It follows from this that a ἱστιαϊκόν must have been valued at half an Attic drachma.

These coins are usually classified as tetrobols. Their weights vary rather widely, but since the types are the same, there is no reason to suggest that some of them were triobols and the others tetrobols. It is not yet clear whether the variation in weights is the result of carelessness, of striking *al marco*, so that the difference did not matter so long as enough coins were obtained from a total weight of silver, of striking coins of a slightly higher weight for export, or of the earlier issues weighing more than the later ones;[17] and the cataloguers on Delos did make mistakes sometimes. Because of this, it would not be advisable to place too much reliance on this single piece of evidence; but the possibility remains that the ἱστιαϊκά were never thought of as anything but hemidrachms.[18]

[16] 1443 A II 42–3, 1450 A 192–3.

[17] W. P. Wallace, "The Meeting-Point of the Histiaian and Macedonian Tetrobols," *NC* 1962, pp. 17–22, pls. 3–4, considered it likely that the difference in weight might be of use in distinguishing one issue from another.

[18] In several other cases the values given to coins in these inventories are not those which our catalogues tell us should be given to them. If the diobol which we have given to Paros (see note 13 above) is correctly attributed, this creates a difficulty, since the coins which we have are classed as triobols. A Lacedaemonian drachm appears in 1408 A II 6–7 and 1444 Aa 18; our catalogues call the coins which this mint issued during the second century B.C. tetrobols. A coin which is described as δραχμὴ τριποδηφόρος in 1439 Abc II 6

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The vanishing coins of Orchomenus

In 279 B.C. the inventory of the temple of Artemis recorded the existence of 410 obols of Orchomenus among its treasures. We must suppose these to have been of Boeotian Orchomenus, since the Orchomenus in Arcadia does not seem to have struck any silver coins. The same group of coins is mentioned fourteen times in all, appearing for the last time in 141 B.C.[19] On the first three occasions when they are mentioned, the number is given as 410. It then dips to 400, rises to 410 again, and falls to 398 in the next three inscriptions in which it appears. After falling again to 386 it settles at 358, where it remains until the very last inscription, where only part of the number remains, the last two figures ΔΠ, which suggests a further drop, whatever the actual sum might have been.

These figures have been dismissed as the result of carelessness on the part of the cataloguers.[20] But this is unlikely, because discrepancies in the figures from year to year would surely have been queried. It would be easy to believe in carelessness which led to the repetition of a mistaken entry; but the whole purpose of the inscriptions was to prove that the property of the gods was being safely guarded and carefully administered, so the gradual decrease in the number of coins in this particular deposit needs some other explanation.

There is one case in which evidence survives for the removal of votive coins from a sacred deposit. At some time in the third century B.C. the administrators of the shrine of Amphiaraus at Oropus needed new vessels for religious purposes, and obtained the metal by melting

is probably of Cnidus (mentioned again in 1443 A I 144, 1449 Aab II 16 and 1450 A 99). But the second century coins of Cnidus with tripod as type are listed as tetrobols. The fourth century silver coinage of Maroneia includes coins which we usually call "staters." But in a Delian inventory of 364 B.C. (Th. Homolle, "Inventaires des Temples déliens en l'année 364," *BCH* 1886, pp. 461–475) they are described as τρίδραχμα μαρωνιτικά. In all these cases it may be our classifications which are at fault; on the other hand, we cannot place absolute reliance on the cataloguers who drew up the lists of offerings in the Delian sanctuaries.

[19] 161 B 19, 162 B 16, 164 A 64, 199 B 44, 203 B 70, 287 B 29, 296 B 49, 338 Bb 13, 367 line 20, 396 Ba 81–2, 399 Bb 130, 442 B 190, 443 Bb 117, 444 B 35, 1444 Aa 17.

[20] M. N. Tod, "Epigraphical Notes on Greek Coinage: Addenda," *NC* 1955, pp. 125–130 (where it is pointed out that the restoration of 389 obols in the eighth inscription of this series is unlikely to be correct).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

down some of the offerings already there, selecting them from those which were worn or damaged; they also removed a number of coins which were described as νόμισμα ἐκπεπτωκός, i.e., which had fallen down from the walls or the statues to which they had been fixed.[21] But in this case, great trouble was taken to explain in a public inscription what had been done, and to list the coins which had been taken, as well as their donors. No such attempt was made in the case of the Delian offerings, It seems, therefore, that we have no parallel for such a disappearance of coins from a votive deposit over the years. Someone must have dipped into the till from time to time, and it must have been for a legitimate purpose; but beyond this we must remain in doubt.

A coin of Pergamum?

In an inventory of ca. 150 B.C. the word ...περγαμηνόν appears, in a context which otherwise seems to be concerned with listing sums of money.[22] This cannot be a cistophorus, since these coins are referred to elsewhere by the term κιστοφόρος or κισσοφόρος,[23] and it will not have been one of the regal issues, since they were described by the name of the ruler which appeared on them. If it was a coin, it must have been an old one, issued before the time of Alexander the Great, which survived in circulation for an unusually long time.

A Persic tetradrachm and drachm

These two coins appear in three inscriptions which contain inventories dated between 145 and 140 B.C.[24] There is no chance that this might be a reference to the siglos or its fractions: it could not be described as a tetradrachm, and its name was perfectly well known to Greeks at all periods of its existence. It is possible that the coins in question were some of the satrapal issues of Asia Minor, but these are comparatively early in date, so this is a less likely solution. There

[21] *IG* VII, 303. For coins fixed to statues or placed in their hands, see also Homolle, *BCH* 1886, pp. 461–475, lines 95–6 and Lucian, *Philopseudes* 20.
[22] 1439 Bbc 87.
[23] 1422 line 5, 1439 Abc I 13–14, 1430 h 12, 1441 A I 45, 1443 A I 149, 1449 Aab II 23, 1450 A 102.
[24] περσικὸν τετρᾶχμον καὶ δραχμήν in 1443 A I 148–9, 1449 Aab II 22, 1450 A 102.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

remains one other possibility, that the reference is to coins of the small semi-independent kingdom of Persis, which was left by the successors of Alexander to manage its own affairs for the most part. Since their legends are in Aramaic script, it is possible that a temple treasurer who knew their place of origin, but could not transliterate the name of the ruler which appeared on them, might have described them as "Persic."

"Ptolemaic grasshoppers"

There is a group of seven references to "two little golden Ptolemaic grasshoppers," and three later inscriptions seem to offer a garbled version of the same phrase.[25] As in so many other cases, this is an instance of a repeated inventory, so the same two objects will have been in question on each occasion. The first possibility which has presented itself to commentators is that these are not coins, but ornaments, and in support of this suggestion it is possible to quote two pieces of evidence, the remark made by Thucydides[26] about the ornaments for the hair which had been favored by members of the aristocratic families of Athens, and a fourth century inscription from Samos[27] which describes a statue of a woman as holding or wearing gilt grasshoppers, ἔχει τέττιγας ἐπιχρύσας. In each case the "grasshoppers" are clearly ornaments or pieces of jewelry, and there is a third example, a fourth century inscription from Athens,[28] where golden τέττιγες appear in an inventory, and may possibly be ornaments of the same kind.

It is, however, most unlikely that the τεττίγια of our inscriptions from Delos can be explained in this way. In the first place, they are mentioned among coins; and there is no reason why any other class of object should be introduced into such a list. Again, such an ornament would hardly be described as "Ptolemaic;" our evidence suggests rather that it was archaic in character. It is also rather

[25] τεττίγια πτολεμαϊκὰ χρυσᾶ δύο (with the second or third words occasionally omitted) in 158 A 5 and 36, 159 A 72, 161 A 4 and 123, 199 A 3 and B 99, 203 B 65, 208 line 35, τετελεκικια δύο in 295 line 16, 298 A 152, 338 Ba 7.
[26] I.6.
[27] C. Michel, *Recueil d'inscriptions grecques* (Brussels, 1900), no. 832, lines 50–52.
[28] *IG* II² 656, 3–4.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

suspicious that the form of the word should have changed from the masculine to a neuter diminutive not recorded elsewhere.

There are no Greek gold coins which have a grasshopper or cicada as their type, so this explanation is denied to us; besides, by the convention which governed the formation of words describing coins by their types, they would have been called τεττιγοφόροι if they had existed.[29] Admittedly, one reads of the "owls" of Athens, the "colts" of Corinth and the "turtles" of Aegina, but this is literary and poetical language, rather than the terminology in which these accounts were kept.

The only explanation which seems possible is based on the observation of entries in five later inscriptions, where there are references to Ptolemaic τέταρτα.[30] Again, these are fragments of inventories repeated from one year to another, although it does not appear to be the same list as the earlier one which had contained the τεττίγια. But even if they are not the same coins, it is still likely that we have here the same word, this time correctly preserved, and this suggestion is strengthened by the fact that the τέταρτα appear in the lists among gold coins, so it is certain that they too were of this metal. Most of the early Ptolemies struck large gold coins, usually octadrachms, and smaller gold coins a half or a quarter of that weight were also issued. If we consider the octadrachms as being the staters of the series, then the τέταρτα will be gold didrachms, "quarter-pieces" of these.[31]

Is it likely that this is also what the τεττίγια were, and that τέταρτα πτολεμαϊκά has become corrupted, perhaps again from the writing on some list or ticket, into τετελεκικια and τεττίγια πτολεμαϊκά? An emendation of this sort would be a small matter in dealing with

[29] A term which was in fact used by Aristophanes (*Knights* 1331) to describe the aristocrats of Athens.

[30] 385 g 10, 396 Ba 77, 442 B 189, 443 Bb 114, 444 B 32. In the first two instances the editors have restored τεταρτημόρια, but it is hard to believe that this would have been used to describe gold coins, which these ought to be, because of the position which they occupy in the lists.

[31] It may be objected that τετάρτη, not τέταρτον, is the proper form, and it is true that our lexicons give the impression that the latter is a rare word. But I have stumbled by chance over two examples of τέταρτον in Greek inscriptions during the course of a fortnight's casual reading (*BCH* 1883, p. 100 and 1888, p. 262), so it is surely not so very uncommon.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the manuscript of an ancient author, but one does not expect to find blunders of this magnitude in lapidary work. Still, it is not impossible that such an error was committed, and that when it had been committed it was repeated for some time. Perhaps it is significant, too, that the second τετελεκικια in our list appears on the stone *in rasura*; in other words, someone deliberately chiselled away what was there in the first place, and went to some trouble to make sure that this meaningless word kept its place there.

"Alliance" coins

Between 146 and 139 B.C. there are several references to συμμαχικά.[32] The most common league coinage in circulation in Greece at this time was that of the Achaean League, but the term ἀχαϊκόν has already occurred in our lists.[33] Other coinages issued by groups of Greek states might also be described as "alliance" money, but they all bear legends naming the league to which they belong, and so would be more appropriately described in our inventories as Acarnanian, Aeolian, Aetolian, etc. The only ones which would immediately be referred to as "alliance" coins are the early fourth century ΣΥΝ issues put out by Ephesus and a number of other cities.[34] It is most probable that these were the coins which appear here, in spite of the length of time between their issue and the appearance of this term in the inscriptions.

"Syrian drachmas"

In an inscription of 364 B.C. five συρίαι δραχμαί appear.[35] These can hardly be Syrian: ancient Syria as a whole issued no coinage, and

[32] 1442 B 52, 1443 A II 150 and 160, 1449 Aab II 24 and 35, 1466 line 5.

[33] 1421 Ab I 4. In its own area, of course, any of the league coinages might be described as συμμαχικόν. In *IG* V, 2, 345, line 21, an inscription from Arcadian Orchomenus, the term most probably refers to the coinage of the Achaean League, while in *IG* VII, 1743, lines 7 and 11, it must be coinage of the Boeotian League which is meant.

[34] Recent discussion of the purpose of these issues has not led to any suggestion that the dates assigned to these coins should be appreciably changed; see G. L. Cawkwell "A Note on the Heracles Coinage Alliance of 394 B.C.," *NC* 1956, pp. 69–75 and "The ΣΥΝ Coins Again," *JHS* 1963, pp. 152–154, together with J. M. Cook, "Cnidian Peraea and Spartan Coins," *JHS* 1961, pp. 56–72, esp. pp. 66ff. and J. P. Barron, *The Silver Coins of Samos* (London, 1966), pp. 117ff.

[35] Homolle, *BCH* 1886, pp. 461–475, 105.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

this inscription is too early for us even to consider the possibility that the reference is an unusual way of describing coins of one of the Seleucid kings. The coins must therefore have been issued by the mint of the neighboring island of Syros. The rare silver issues of that mint are conventionally dated after the time of Alexander. Is our dating wrong, or were there some earlier issues which have not survived or have passed unrecognized? It is not at the moment possible to say; all that one can do in this case, as with several other problems presented by these inscriptions, is to point out the difficulty, and hope that in the course of time it will be resolved by fresh discoveries, or by an extension of our knowledge in some other way.

Since this article went to press, I have noted some other small points which might be mentioned here. A reference to "Cretan silver" appears in a late Hellenistic decree of Axus (*I. Cret.* 2.V.35, line 14), but there is no further explanation of its meaning; nor should we expect that the phrase would necessarily mean the same outside Crete as it did within it. For another example of "Argolic" drachms, see *IG* IV² (1) 97, 21 and 36, quoted by M.N. Tod, *NC* 1960, p. 5; on the same page this writer assumes, though without argumentation, that the coins of Apollonia are of Apollonia Illyrici. I have not been able to procure the text of the early fourth century inscription cited by L. Robert, *RN* 1962, p. 26, which mentions "symmachic" coins; but its existence does no damage to my explanation of the term.

I have also noticed that Svoronos (*JIAN* 1900, pp. 59–72) attributed some anepigraphic archaic coins with rider on dolphin as type to Syros. But even if this is correct, the coins seem rather too early to explain our fourth century inscription.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

COINAGE OF THE LATER ARTAXIADS

(PLATE XXXV)

PAUL Z. BEDOUKIAN

Since the publication of the author's "Classification of the Coins of the Artaxiad Dynasty of Armenia,"[1] additional material has come to light which contributes substantially to the record.

The existence of jugate coins of Tigranes IV with his sister-queen Erato confirms their joint rule. Moreover, these coins support the author's earlier attribution of the bearded types to Tigranes IV. The discovery of several copper coins attributed to Artavasdes III supports the reports that he succeeded Tigranes IV. Three little-known coins of the "new" Tigranes have now been reattributed to Tigranes V on the basis of the study of the style of these coins and evidence elicited from a critical review of historical material.

TIGRANES IV AND TIGRANES IV-ERATO

1. *Obv.*: Head of heavily bearded king r., diademed and wearing Armenian tiara.
   Rev.: To r. ΒΑΣΙΛΕΩΣ/ΤΙΓΡΑΝΟΥ. To l. illegible inscription ΜΕΓΑΛΟΥ(?) Victory standing r., upraised r. hand holding wreath and l. arm holding cornucopiae.
   Mechitarist Museum (Vienna), 6.5 gr.

2. *Obv.*: The king as 1., accompanied by Queen Erato r.[2]
   Rev.: To r. ΒΑΣΙΛΕΩΣ/ΤΙΓΡΑΝΟΥ. To l. ΜΕΓΑΛΟΥ(?) Fortune to l. seated on throne, holding cornucopiae in l. hand and in r. an uncertain object.
   (a) Guevrekian collection (New York), 6.6 gr.
   (b) P. Bedoukian, 5.7 gr.[3]

[1] *ANSMN* 14 (1968), pp. 41–66.
[2] *ANSMN* 14, no. 31 may actually be a jugate coin (see pl. XXXI) but the condition of the obverse is such that a final decision will have to be deferred until sufficient examples of this type are available for comparative study.
[3] Two other specimens are known to the author.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

3. *Obv.*: The king as r., accompanied by Queen Erato r.
Rev.: To r. ΒΑΣΙΛΕΩΣ/ΤΙΓΡΑΝΟΥ. To l. ΜΕΓΑΛΟΥ.
Below ΤCΥ.
Front part of horse prancing r.
Donabedian Collection (Beirut, Lebanon).

Artavasdes III

Attributions are based on the fact that these coins differ markedly in style from the coins of Artavasdes II and Artavasdes IV.

4. *Obv.*: Head of Artavasdes r. diademed and wearing Armenian tiara.
Rev.: To r. ΒΑΣΙΛΕΩΣ. To l. ΒΑΣΙΛΕΩΝ/ΑΡΤΑΥΑΖΔΟΥ. King's (?) figure standing l., holding wreath (?) in his outstretched hand and resting l. hand on tall spear.
(a) Guevrekian collection, 6.2 gr.
(b) P. Bedoukian, 5.2 gr.

5. *Obv.*: As 4.
Rev.: To r. ΒΑΣΙΛΕΩΣ/ΒΑΣΙΛΕΩΝ (?) To l. ΑΡΤΑΥΑΖΔΟΥ. Figure standing to l., right hand holding tall spear, left hand resting on shield.
P. Bedoukian, 6.9 gr.

Tigranes V

About A.D. 6 Augustus put on the throne of Armenia a Tigranes whom he described as a scion of the royal stock of Armenia.[4] J. G. C. Anderson[5] says of Tigranes V that "he was, beyond a reasonable doubt, a grandson of Herod the Great, son of Alexander and Glaphyra, daughter of the Cappadocian king, Archelaus, whose first wife was in all probability of the Armenian royal house."

The following three coins are so similar in style and type that they must be attributed to one monarch. They are distinct from the coinage of Tigranes IV in that the latter's portraits are all heavily bearded and no explanation exists for calling him the "new" Tigranes.

[4] *Res Gestae*. 25–32.
[5] *CAH* X, p. 277.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Therefore, previous attributions of these three coins to Tigranes IV must be abandoned and a new attribution made to Tigranes V.[6]

6. *Obv.*: Bust of Tigranes r., diademed and wearing Armenian tiara. Clockwise legend ΒΑCΙΛΕΥC ΒΑCΙΛΕΩΝ ΤΙΓΡΑΝΗC.
   Rev.: Bust of Queen Erato l. Counterclockwise legend ΕΡΑΤΩ ΒΑCΙΛΕΩC ΤΙΓΡΑΝΟΥ ΑΔΕΛΦΗ.
   BN, 7.0 gr.[7]

7. *Obv.*: Bust of Tigranes r. as 6. Clockwise legend ΒΑCΙΛΕΥC ΜΕΓΑC ΝΕΟC ΤΙΓΡΑΝΗC.
   Rev.: Bust of Queen Erato as 6. Counterclockwise legend ΕΡΑΤΩ ΒΑCΙΛΕΩC ΤΙΓΡΑΝΟΥ ΑΔΕΛΦΗ.
   Hunterian, 6.95 gr.[8]

8. *Obv.*: Bust of Tigranes r. as 6. Clockwise legend ΒΑCΙΛΕΥC ΜΕΓΑC ΝΕΟC ΤΙΓΡΑΝΗC.
   Rev.: Head of Augustus l. Counterclockwise legend ΚΑΙCΑΡ ΘΕΟC ΘΕΟΥ ΥΙΟC CΕΒΑCΤΟC.
   Ashmolean, 15 gr.[9]

In the legend "The great king, the new Tigranes," the words ΝΕΟC ΤΙΓΡΑΝΗC must be taken to mean a new or different Tigranes, not to be confused with the previous Tigranes IV. On the reverse, the legend "Erato, the sister of king Tigranes," must refer to Tigranes IV. Therefore while the obverse belonged to Tigranes V, the reverse placated the Armenians by honoring Erato and the royal line.

[6] *ANSMN* 14, no. 40, which was tentatively assigned to Tigranes V must now be reattributed to some other Tigranes, possibly Tigranes III.
[7] *ANSMN* 14, no. 38 (under Tigranes IV).
[8] G. Macdonald, *Cat. of the Greek Coins in the Hunterian Collection*, III, p. 4, pl. LXIII, 6. I wish to thank Dr. Anne S. Robertson for sending me a cast of this coin.
[9] I am grateful to Dr. D. M. Metcalf for informing me of the presence of this coin and for sending me a cast. I am told that the coin belonged to Dr. S. G. Milne who bought it from Mr. E. Rogers in 1934. It was earlier a part of the Prowe collection (Th. Prowe, *Trudi of the Moscow Num. Soc.*, III [1905], p. 155, pl. IV, 21) and was sold at the Egger sale in Vienna in 1904. It is probable that is passed into Mr. Rogers' hands at this sale.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

CONSTANS II OR HERACLONAS?

An Analysis of the Constantinopolitan Folles of Constans II

(PLATES XXXVI–XXXVII)

GEORGE E. BATES

The traditional view that a beardless bust type of Constantinopolitan follis dated year three, with *Inper. Const.* legend, was issued for Constans II (A.D. 641–668) has been challenged by Philip Grierson.[1] He attributes this type of follis to Constans' predecessor, Heraclonas, who reigned some six months in A.D. 641. He also attributes several other issues to Heraclonas which were formerly assigned to Constans.[2] The key to whether most of these reattributions are justified lies in the above-mentioned folles from the mint of Constantinople.

As a prelude to discussion of this specific problem, a description and brief analysis of the Constantinopolitan folles of Constans II is in order, to provide a setting for the *Inper. Const.* folles, which I have denominated Class D. My present classification of those folles is as follows.

Class A (regnal years 1, 2 and 4) PLATE XXXVI, 1, 2.

Obv.: ЄNTδTO NIKA, ЄNTδT O NIKA, ЄNTδT ONIKA or ЄNTδT ON IKA (frequently with A for A).
Emperor, beardless, standing facing, wearing chlamys and crown with cross; in his r., long cross; in his l., gl.cr.

Rev.: M Above, (in year 1) nil or cross, (in year 2) cross or * or K, (in year 4) cross; to l., ANA (vertical); to r., (in year 1) NЄOS NЄOS or NЄOS (vertical), (in year 2) NЄOS, NЄOS, NЄOS, NЄOSS, NЄOYY, NЄOS, NЄOS or NЄOY (vertical) (in year 4) NЄOY (vertical); in ex., officina letter (A,B,Γ, Δ or Є) followed by regnal year (I, II or IIII).

[1] *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection*, II.2 (1968), pp. 396–397.
[2] *D. O. Cat.* II.2, pp. 389–401.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

For regnal years 1 and 2 this is Dikigoropoulos' Type A(a),[3] Bendall's Type I,[4] Grierson's Class 1[5] and *Sardis* Class A;[6] and in year 4 is Dikigoropoulos' Type A(b), Bendall's Type V (in which he must have inadvertently included year 4 since he describes his Type V as having the officina letter after the date), Grierson's Class 4 and *Sardis* Class A.

Class B (regnal years 2 and 3)[7] PLATE XXXVI, 3.

Obv.: Same as Class A except that in year 3 the emperor holds in his r. a long christogram.

Rev.: M Above, ANA; to l., OΦA (vertical); to r., NEOY or NEOЧ (vertical); in ex., officina letter (A, B, Δ or E) followed by the regnal year (II or III).

This is Dikigoropoulos' Type B, Bendall's Type II, Grierson's Class 2 and *Sardis* Class B.

Class C (regnal year 3)[8] PLATE XXXVI, 4.

Obv.: Same as Class A except that the emperor holds in his r. a long christogram.

Rev.: M Above, ANA; to l., III; to r., NEOY or NEOL (vertical); in ex., officina letter (A, B, Δ or E).

This is Bendall's Type III, Grierson's Class 3 and *Sardis* Class C.

[3] A. J. Dikigoropoulos, "A Byzantine Hoard from Kharcha, Cyprus," *NC* 1956, pp. 255–265.

[4] S. Bendall, "A Mid Seventh Century Hoard of Byzantine Folles," *Num.Circ.* 1967, pp. 198–201. This is sometimes referred to as the "Turkish Hoard."

[5] *D. O. Cat.* II.2, p. 409.

[6] George E. Bates, *Sardis*, Vol. I, *Byzantine Coins* (Cambridge, Mass., 1971).

[7] C. Morrisson, "Catalogue des Monnaies Byzantines de la Bibliothèque Nationale," Doctoral Thesis, University of Paris (1968), lists two Class B folles of regnal year 3, officina E, with emperor holding long christogram rather than long cross.

[8] Bendall, *Num.Circ.* 1967, p. 200, describes a variety of Class C which may well deserve a place as a class intermediate between Classes C and D. This is his coin no. 141. The only other known specimen is one which Mr. Bendall has subsequently acquired. The ANA is to left of the M and the NEO is above the M, to right of which is the date $\frac{II}{I}$. The officina letter E is in the exergue. The obverse is the same as Class C.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Class D (regnal year 3) PLATE XXXVI, 5.

Obv.: IMPER CONSƬ (with the final letter sometimes Ƭ, Ƭ or T) Bust of emperor, beardless, facing, wearing chlamys and crown with cross; in his r., gl.cr.

Rev.: M Above, cross; to l., ANA (vertical); to r., II / I (sometimes I / II); beneath, officina letter (A, B, Γ, Δ or E); in ex., NEOЧ, NEOЧ or NEOϒ.

This is Dikigoropoulos' Type C, Bendall's Type IV and *Sardis* Class D. Grierson attributed it to Heraclonas as his Class 1.[9]

Class E (regnal years 5–7)[10] PLATE XXXVI, 6.

Obv.: Same as Class A except that in year 6 some figures of the emperor are beardless and some have a slight beard (appearing as either dotted or a "double chin"); in year 7 perhaps all have the slight beard (the worn condition of many specimens makes it impossible to say "all" with absolute certainty).

Rev.: M Above, cross or ✱ or K; to l., ANA (vertical); to r., NEOЧ, NEOЧ, NEOϒ or NEOI (vertical); in ex., regnal year (Ч, Ϛ or Ϛ I) followed by the officina letter (A, B, Γ, Δ or E).

This is Dikigoropoulos' Type A(b), Bendall's Type V, Grierson's Class 4 (in which he included year 4 with the officina letter preceding the date) and *Sardis* Class E.

[9] *D. O. Cat.* II.2, pp. 396–397. Grierson's Class 2 of Heraclonas (p. 398) is similar to Class D except that the bust has a short beard and on the reverse the NEO is to right of the M. On Wroth's no. 180 and the only other known specimen (in the Soli hoard published by A. Westholm, "A Hoard of Bronze Coins of Constans II," *Nordisk Numismatisk Årsskrift* [1940], p. 141, no. 37) neither date nor officina letter is legible. Uncertainty concerning this issue has led me to omit it from the classification. Wroth attributed it to Constans II. If Class D can be attributed to Constans, Wroth's attribution is undoubtedly correct. If it is an imperial issue the short beard would indicate a date ca. 647–650 for Constans II.

[10] There are some folles of Class E which appear to be of regnal year 8, but they are in such poor condition that positive identification has been impossible (PLATE XXXVI, 7). There may also be a few coins of Class A which were struck in year 3, but for similar reasons this is quite uncertain.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Class F (regnal years 11–15) PLATE XXXVI, 8.

Obv.: Same as Class A except that the emperor is bearded.

Rev.: M Above, (in year 11) cross, (in years 12–15) ✱ (or, rarely, a cross); to l., ANA (vertical); to r., NEOY, NEOЧ or NEOϚ (vertical); beneath, officina letter (A, B, Γ, Δ or E); in ex., regnal year (IA, XII, XIII, XIIII or XЧ).

This is Bendell's Type VI, Grierson's Class 5a for year 11 and 5b for years 12–15 and *Sardis* Class F for year 11 and Class G for years 12–15.

Class G (regnal years 15–16) PLATE XXXVI, 9.

Obv.: Same as Class F.

Rev.: M Above, ✱; to l., KΩN (vertical); to r., CTAN (vertical); beneath, officina letter (A, B, Γ, Δ or E); in ex., regnal year (XЧ or XϚ).

This is Grierson's Class 6 and *Sardis* Class I.

Class H (regnal years 15 and 17) PLATE XXXVI, 10.[11]

Obv.: Same as Class F.

Rev.: M Above, K or occasionally a cross; to l., ANNO (vertical); to r., regnal year ($\overset{X}{Ч}$ or $\overset{X}{ЧI}$, published); beneath, officina letter (A, B, Γ, Δ or E); in ex., CON.

This is Grierson's Class 7 and *Sardis* Class H.

Class I (regnal years 15–17) PLATE XXXVI, 11.

Obv.: No inscription.

To l., Constans II, bearded, standing facing, wearing military garb and crown with cross, holding in his r., long cross, his l. resting on hip; to r., Constantine IV, beardless, standing facing, wearing chlamys and crown with cross, holding in his r., gl.cr.; between their heads, cross.

[11] All coins illustrated are in the author's collection except this example of Class H which was illustrated in Bates, *Sardis*, coin no. 1088.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: M Above, K or occasionally a cross; to l., ANNO (vertical); to r., regnal year (X Y, X YI or X YI I); beneath, officina letter (B, Γ, Δ or Є); in ex., CON.

This is Grierson's Class 8 and *Sardis* Class J.

Class J (regnal years 19–21 and 23) PLATE XXXVII, 12.

Obv.: No inscription.

Constans II, bearded, standing facing, wearing military garb and helmet with plume; in his r., long cross; his l. on hip; in field l., regnal year (I Θ, X X, K A or X X Γ, published) in field r., M with cross above and officina letter (A, B, Γ, Δ or Є) below.

Rev.: Heraclius, Constantine IV and Tiberius, beardless, standing facing, each wearing chlamys and crown with cross and holding in his r., gl.cr. In year 19, in field r., often an officina letter which sometimes corresponds to the officina letter on the obverse, and sometimes does not (probably the result of muling).

This is Grierson's Class 9 and *Sardis* Class K.

Class K (regnal year 25) PLATE XXXVII, 13.

Obv.: Same as Class I except that in field r., regnal year XXЄ (vertical).

Rev.: M Above, cross (sometimes on 1 or 2 steps); to l., Heraclius, and to r., Tiberius, each wearing chlamys and crown with cross and holding in his r., gl.cr.; beneath, officina letter (B, Γ or Δ); in ex., CON.

This is Grierson's Class 10 and *Sardis* Class M.

Class L (undated; probably regnal years 26–27 or 24) PLATE XXXVII, 14.

Obv.: No inscripton.

Bust of Constans II, bearded, facing, wearing helmet with plume (sometimes with cross also); in his r., gl.cr.; in field r., K.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: M Above, bust of Constantine IV; to l., bust of Heraclius; to r., bust of Tiberius (each is beardless, facing, wearing chlamys and crown with cross, and holding in his r., gl.cr.); beneath, officina letter (A, B, Γ, Δ or Ε).

This is Grierson's Class 11 (divided into two types: with cross and plume on helmet, and with plume alone); and *Sardis* Class L.

ANALYSIS OF THE CLASSES

Analysis of the 12 classes discloses the following noteworthy features.

(1) Only Classes H, I and K have the mint mark CON. The use of the ANANEOY legend left no space for a mint mark on the folles of Classes A–F. The emperor's name similarly left no space on Class G. Effigies of the emperor's three sons precluded a mint mark on Classes J and L. It is safe to attribute all classes to Constantinople, for they evidence the five officinae of that mint and have a fabric which confirms the attribution.

The few instances in which all five officinae are not presently known to me are: Classes B and C of regnal years 2 and 3, officina Γ; Class F in year 12, officinae A and Γ, and in year 15, officina Γ; Class G in year 16, officina Ε; Class H in year 17, officinae B, Γ, Δ and Ε; Class I in year 15, officina A, in year 16, officinae A and Γ, and in year 17, officinae A, B, Γ and Ε; Class J in year 20, officinae A, B and Γ; Class K of year 25, officinae A and Ε.

(2) All regnal years are represented in the dated folles except years 8, 9, 10, 18, 22, 24, 26 and 27. There are a few folles which appear to be of year 8, but their poor condition makes positive identification impossible.[12] The undated Class L may have been struck in regnal years 26 and/or 27 or in year 24 and perhaps 25.

Regnal year dating was Roman in A.D. 641–648, Greek in 651/2, Roman in 652–658, Greek in 659/60, Roman in 660/1, Greek in 661/2, and mixed Roman and Greek in 663/4 and 665/6.

[12] See note 10 regarding year 8. Grierson, *D. O. Cat* II. 2, p. 410, writes, "No coins of Year 18 have been recorded, but they may exist among unidentified ones of Class 8 [my Class I]."

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In regnal years 1–3 (Classes A and B) the date appeared in the exergue on the reverse. In year 3 (Classes C and D) it was beside the mark of value on the reverse.[13] In years 4–16 (Classes E–G) the date was restored to the exergue on the reverse. In years 15–17 (Classes H and I) the date was in its conventional place to right of the mark of value, with ANNO (vertical) to the left, for which space was provided by omitting the ANANEOY legend. In years 19–23 (Class J) the date was in the left obverse field, and in year 25 (Class K) in the right obverse field. The change from the date's normal place on the reverse was the result of devoting space on the reverse to three (Class J) or two (Class K) of Constan's sons.

(3) One of a number of problems in this series is posed by the several classes which were struck in the same years. Class F may have been succeeded in regnal year 15 by Classes G, H and I, but two or three of the latter must have been struck in the same years to serve different purposes. In the early years of Constans' reign, however, there was evidently considerable experimentation before a definitive type was settled upon. Begging the question for the moment of whether Class D should be transferred to Heraclonas, there was Class A being struck in regnal years 1 and 2, to be succeeded in the latter year by Class B. Class B was continued into year 3, when it was replaced by Class C (which in turn may have been replaced by the variety mentioned in note 8). Then Class D was struck for the major part of year 3, judging by the much greater number of these coins which have been found. In year 4 Class A was restored as the presumably most popular type. Class E continued the type of Class A in years 5–7.

(4) The miserable condition of most of these folles, the majority of which were overstruck on clipped flans of earlier folles, makes it improvident to pursue questions of metrology much further than to say that in general the average weight of the last Heraclean issue of A.D. 639–641 was maintained from 641 to 648 (Classes A–E); and substantially restored in ca. 665–668 (Classes K and L). During the intervening period 651–664 (Classes F-J) the weight was reduced some 25 to 30 per cent.

[13] This was also true of the Class C variety described in Note 8.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Average weights, in grams, of the Constantinopolitan folles of Heraclius in the Dumbarton Oaks catalogue (Grierson's Classes 1–6) and of Constans in that catalogue (including Heraclonas Class 1) and in my collection (Classes A–L) are as follows.[14]

HERACLIUS

Class	*Dates*	*No. of Specimens*	*Av. wt.*
1	610–613	18	10.5
2	613–615	65 (59)	11.0 (11.1)
3	616–624	16	8.5
4	624–629	21	5.8
5a	629–631	21	10.6
5b	631–640	30	5.5
6	639–641	15	4.4

CONSTANS II

		Dumbarton Oaks		Bates	
Class	*Dates*	*No. of Specimens*	*Av. wt.*	*No. of Specimens*	*Av. wt.*
A	641–643	16 (15)	5.0 (4.7)	26	4.7
B	642/3	14	4.7	7	4.7
C	643/4	3	5.2	3	3.7
D	643/4	9 (8)	5.4 (5.2)	22	5.2
A	644/5	2	4.7	4	4.4
E	645–648	31	4.3	31	4.2
F	651–656	25	3.1	23	3.3
G	655–657	14	3.3	14	2.8
H	655–658	8	2.9	3	2.3
I	655–658	10	3.4	8	4.1
J	659–664	29	3.1	13	3.1
K	665/6	8	4.3	2	4.4
L	ca. 664–668	17	4.4	17	4.4

(5) The emperor's name was given on Class D folles in 643/4 as CONSƬ and on Class G in 655–657 as KѠNCTAN, innovatively placed

[14] The average weights vary slightly from those given in *D. O. Cat.* II.1, p. 23. Table 3 and p. 25, Table 4 which contain a few minor errors.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

on the reverse. It was also indicated by the initial K above the mark of value on a few coins of Classes A and E and of most coins of Classes H and I, and in the right obverse field of Class L.

Names of the emperors had appeared on the obverse of Byzantine folles until the year 616 when Heraclius introduced a type without inscription. In 624 he added the monogram ☧, and in 629 used that same monogram for himself but added K for his son, Heraclius Constantine. When the figure of Heraclonas was included in 639 only the monogram ☧ was used.

Constans II's full name CONSTANTINVS was used only on his gold and silver coins and on some copper coins of western mints.

(6) Constans II is represented without a beard in regnal years 1–6 (Classes A–E) when he was aged 13 to 17, with a slight beard in years 6 and 7 (Class E) when he was 17 to 19, and with a long beard in year 11 (Class F) when he was 23, and thereafter.

(7) Constans II is shown wearing the chlamys in regnal years 1–17 (Classes A–H) and in military garb in years 15–ca. 27 (Classes I–L). All were standing figures except in years 3 and ca. 24–27 (Classes D and L) where they were facing bust types.

In the standing figures types the emperor held a long cross in his right hand, except for Classes B and C in year 3 when he held a long christogram. In the bust types he was shown holding in his right hand a globus cruciger.

(8) Constans' son, Constantine IV, was introduced on the follis of Class I in 655/6. His two younger sons, Heraclius and Tiberius, were added on Class J in 659 and remained on the succeeding Classes K and L until the end of the reign.

Constantine IV was crowned co-emperor in April 654, and Heraclius and Tiberius were crowned in 659, probably in June.[15]

(9) The mark of value in regnal years 1–7 was the uncial M, with the exception of Class D in year 3 which had the capital M. The capital M was used from the time coinage of folles was resumed in regnal year 11.[16] The mark of value was placed on the reverse of all classes

[15] *D. O. Cat.* II.2, p. 402.

[16] As suggested in Note 9, M as mark of value might also have been used a year or two earlier than regnal year 11.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

except Class J, on which it was moved to the obverse to accommodate the three standing figures of the emperor's sons on the reverse.

Above the mark of value appear various symbols:

Regnal year	1	*Class*	A	nil or cross
	2		A	cross or ✱ or K
	3		D	cross
	4		A	cross
	5–7		E	cross or ✱ or K
	11		F	cross
	12–15		F	✱ or cross
	15–16		G	✱
	15, 17		H	K or cross
	15–17		I	K or cross
	19–21, 23		J	cross
	25		K	cross

On many folles the symbol is off the flan or illegible. In Classes B, C an L there was no space for a symbol above the mark of value.

(10) The obverse inscription ЄNTδTO NIKA, with variant spacing, appears on all Classes A–H except Class D on which it was replaced by the IПPЄR COПSƬ inscription. The variation in spacing merely accommodated the spaces available around the die sinker's figure of the emperor. There is no obverse inscription on Classes I–L.

The IПPЄR COПSƬ inscription on Class D often had a mark of abbreviation attached to the Ƭ as Ƭ. IП is a Latin variant of IM, the full title being *Imperator*. That title is rather anomalous in the 7th century when the usual title on the coinage was DN for *Dominus Noster*. IMP had not appeared on the coinage since the 5th century.

As successor to his father's designation as the "new Constantine" the title of *Imperator* may have been considered appropriate as identifying Constans with Constantine the Great. The unfamiliarity of the title to the generation in which these copper coins circulated may have led to its discontinuance after a trial period in regnal year 3.

(11) the ANANЄOSIS legend was used on all Classes A–F. The ultima was always abbreviated. The abbreviations followed a sequence which has significance for the attribution of Class D.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Class A	*Year* 1	ѕ, S, S
A	2	S, S, S, SS, ϟ, ∠, Ч, ЧЧ
B	2	Ч, Ч.
B	3	(?)
C	3	∠, Ч
C var.	3	(?)
D	3	ϟ, Ч, Ч
A	4	Ч
E	5–7	ϟ, Ч, Ч, I
F	11–15	Ч, Ч, S

The ἀνανέωσις legend with its meaning of "restoration" seems to be particularly appropriate for Constans II following the unpopular rule of Heraclonas under the domination of his mother, Martina.[17]

THE CASE FOR CONSTANS II

The case against attributing Class D to Constans II is based principally upon three anomalous features of this class: the capital M as mark of value stands alone in the uncial M series of Classes A, B, C and E; the bust type is remarkable in the midst of the standing figure types of the seven classes, A, B, C, E, F, G and H; the obverse inscription INPER CONSZ is a departure from the *En touto nika* inscription of those same seven classes.

The date of year 3 on Class D would have applied to either Constans or Heraclonas. The latter "was crowned Augustus in July 638 and publicly acclaimed in January 639."[18] Dating his reign from July 638 would give only two or three months in 641 for striking the fairly abundant coins of Class D. Dating from January 639 would give little more than five months in 641 for this coinage. The emperor's beardless bust would have been appropriate for either Heraclonas, who in 641 was 15 years old, or Constans who in 643/4 was 13 years old and whose other coins of 641–646 were beardless.

[17] Grierson, *D. O. Cat.* II.2, p. 394, thought that this legend was "something which one would associate more readily with Heraclius Constantine than with either Heraclonas or Constans II."
[18] *D. O. Cat.* II.2, p. 391.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

There are a number of reasons, however, which have led me to ascribe Class D to Constans II.

(1) The ἀνανέωσις legend appeared on the reverse of Class D, as it had on Classes A, B, C, E and F. If Class D had been issued for Heraclonas by his mother's faction, it is unlikely that that legend would have been adopted by the faction supporting his rival, Constans. The latter faction would have wished to dissociate Constans from the unpopular reign of Heraclonas. The ἀνανεωσις legend proclaiming a "restoration" would have been appropriate and important propaganda for Constans, and we know that his folles carried that legend from his first into his 15th regnal year.

(2) The abbreviation of the ultima of ANANЄOSIS on Class D as ϟ, ϒ or Ч is fitting for the year 643/4 in the sequence of forms for this abbreviation in 641–648, and would be unbelievably prescient for the year 641 prior to the reign of Constans.[19]

(3) The existence of Classes A and B in Constans' regnal year 2, of Classes B and C and the Class C variety in year 3, and the reversion to Class A in year 4 give evidence of considerable experimentation in coin types at that period. The rarity of Classes B and C in year 3 indicates that ample time was left in that year for the further experiment of producing Class D. Apparently the Class A type of years 1 and 2 proved most popular, for it was revived in year 4 and continued as Class E in years 5, 6 and 7. As one of several experimental types another anomaly of Class D becomes understandable.

(4) The anomalous title *Imperator*, as much of an anomaly for Heraclonas as for Constans, can be understood as part of the experimentation conducted during Constans' regnal years 2 and 3. A title given Constantine I could have been thought appropriate for another "new Constantine."

(5) The date on Class D beside the mark of value was a continuation of the experimental placements of the date on Class C and then on the variety of Class C. Class C had the date to left of the mark of value, and the variety of Class C to the right, as did Class D. Lack

[19] See the chronological table of symbols, p. 151 above.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of space for a cross above the mark of value on Class C perhaps led to putting the cross above the date. Then, to balance that composition, another cross was placed below the date.

(6) Mr. Grierson indirectly offered an explanation for the reverse type M when he wrote, "*Ananeo*' left little room for either ANNO or CON, while M was less convenient than M for fitting in an officina letter."[20] He was writing of the confusing practice of running date and officina letter together in the exergues of Classes A, B and E.

On Class A the ANA was to left, and the NEOY to right of the mark of value, but this was changed on Classes B and C to ANANEOY running across the top and down the right of the M. The anomalous OΦA, thought to stand for "officina," occupied the left on Class B. The date was there on Class C. When the date was moved to its traditional place on the right of the M on the Class C variety, the ANA was shifted to the left side with the NEO placed above the M.

This broke the continuity of the legend. The defect was cured when Class D was designed. ANA was retained on the left side of the mark of value, and continuity provided by putting NEOY in the exergue. The date was kept in its normal place to right of the mark of value to which it had been returned on the Class C variety. This arrangement, however, left no space for an officina letter with the mark of value M. That problem was then met by using the capital M beneath which there was room, as Mr. Grierson wrote, "for fitting in an officina letter," and above which the cross could be placed.

(7) The relatively large number of Class D folles which have been found makes it likely that they were struck for Constans II over a major part of his regnal year 3, for folles of Classes B and C of that year are quite rare. Heraclonas would have had only half the time for producing Class D coins as was available to Constans.

(8) The existence of one or two other classes of folles in regnal year 3 is no reason for supposing that Class D was not issued for Constans. Mr. Grierson wrote, "One cannot reasonably interpolate into this series an issue of Year 3 quite different in appearance, ... more

[20] *D. O. Cat.* II.2, p. 408.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

especially since coins of Year 3 also exist of the *En touto nika* type."[21] But he did not hesitate to attribute four dissimilar classes (F, G, H and I) to Constans in year 15.[22]

(9) The name *Constantine* on Class D folles is more appropriate to Heraclius Constantine, Constans II and Constantine IV than to Heraclonas, who was acclaimed Augustus with the name of *Heraclius*. Mr. Grierson's source for believing that Heraclonas adopted the name *Constantine* for his coinage was a brief reference by Theophanes describing him by that name when he had previously been elevated to the rank of Caesar.[23] Theophanes wrote nearly two centuries after that event and, although he undoubtedly had access to sources no longer available, it is questionable how much reliance may be placed on his statements concerning some minor detail and dates. In any event, I would interpret Theophanes' reference to Heraclonas as the "small Constantine" as simply a description of the child which in no way implied official adoption of the name "Constantine."

Acclaimed as *Heraclius*, it is unlikely as a matter of practical politics that Heraclonas would have adopted the name *Constantine* upon the death of the sickly Heraclius Constantine, who was known as Constantine to distinguish him from his father, Heraclius. Martina would have wished to have her son identified with his father, Heraclius, rather than with his half-brother Heraclius Constantine. Further, if Heraclonas has adopted the name *Constantine* it is even more unlikely that either he or the faction supporting his rival, Constans, would have agreed at the time of their joint rule in September 641 to bestow the name *Constantinus* on Constans II.[24] Constans II was always known as *Constantinus* or *Constans*.[25]

Mr. Grierson does attribute to Constans II the beardless, facing bust type of folles, half-folles and decanummia of Carthage (his Class 2 of that mint).[26] With only slight variations these bear the

[21] *D. O. Cat.* II.2, p. 391.
[22] *D. O. Cat.* II.2, pp. 451–454.
[23] Theophanes, A. M. 6108 (ed. de Boor, p. 301), cited by Grierson, *D. O. Cat.* II.2, p. 389.
[24] *D. O. Cat.* II.2, p. 390.
[25] *D. O. Cat.* II.2, p. 402, note 2.
[26] *D. O. Cat.* II.2, pp. 477–479.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

inscription CONSTANTINVSPPAVC. Mr. Grierson dates these coins A.D. 643–647, which would be concurrent with Class D folles of Constantinople if the latter were also attributed to Constans II.[27]

The Evidence of the Overstrikes

The foregoing evidence seems to me to be strongly weighted in favor of attributing Class D to Constans II. The decisive proof, however, can be provided by the overstrikes.

When the understrikes of Class D folles can be identified they are usually of the last two classes of Heraclius.[28] Of the 69 Class D folles in the Kharcha hoard Mr. Dikigoropoulos identified 20 as having been overstruck on Heraclean coins, 45 on which the understrike was illegible, 2 on which there was no sign of overstriking, and 2 overstruck on early folles of Constans II.[29]

Of the 8 folles of Class D in the British Museum catalogue, there were 4 which Wroth noted as having been overstruck on earlier flans, and 2 which he thought were possibly so overstruck. He could only identify 2 of the flans on which the Class D folles had been overstruck, one a part of a clipped follis of Justinian I and the other an M follis of Constans II.[30] Of the 11 or 12 Class D folles in the "Turkish Hoard" Mr. Bendall found one overstruck on an Heraclean follis.[31] In my collection there are 22 folles of Class D of which 8, and possibly 10, were overstruck on Heraclean folles and one clearly, and one other probably, overstruck on flans of Constans II. In addi-

[27] Plate XXXVII, nos. 18–20, illustrate not only a half-follis of the standing figure, *En touto nika* type which Mr. Grierson attributes to A.D. 641–643, but a half-follis and decanummium of the beardless bust type which he dated 643–647. Mr. Grierson's dating of the latter two (confirming the date given by Mr. Phillips), the inscriptions respectively CONST ANTINI and CONSTAN TINVSP[, and the similarity of the beardless busts to those of Class D folles of Constantinople make it difficult to understand how one could attribute these Carthaginian coins to Constans II and Class D of Constantinople to Heraclonas.

[28] *D. O. Cat.* II.2, p. 392, note 14, "Where the understrike can be identified, it is normally a follis of the last issue of Heraclius of Year 30 or 31." Many Class D folles can be identified, however, as having been overstruck on the next to last issue of Heraclius.

[29] Dikigoropoulos, *NC* 1956, pp. 264–265.

[30] Wroth, pp. 266–267.

[31] Bendall, *Num.Circ.* 1967, p. 199, coin no. 48.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

tion, there are in my collection two *En touto nika* folles, one of regnal year 6, overstruck on Class D folles.

Of the 9 Class D folles in the Dumberton Oaks collection Mr. Grierson identified 3 as overstruck on Heraclean folles, and believed that one had been overstruck "by a follis of Constans II's Class 1."[32] Mr. Grierson's Class 1 was struck only in Constans' regnal years 1 and 2. But Mr. Grierson produced no proof that the "overstrike" was by his Class 1 rather than his Class 4.[33] In fact, he says that the only part of the *En touto nika* strike that is visible is "]ONIKA and the upper part of the standing figure" of the obverse and "the NЄOϚ" of the reverse. The illustration of this coin (no. 5b of Heraclonas) also shows that there was no basis for ascribing the *En touto nika* strike to his Class 1 rather than to his Class 4 of regnal years 4, 5, 6 and 7. The ЄNTϬT ONIKA spacing of the inscription is found in year 7 as well as in years 1 and 2. From the illustration of his coin 5b it would appear that the visible reverse legend on the *En touto nika* strike is NЄOI, not NЄOϚ. If that is so, it may be noted that the "I" as mark of abbreviation is characteristic of regnal years 5, 6 and 7 rather than of years 1 and 2.

The Class D follis in the British Museum (no. 94), described by Wroth as having been overstruck on an M follis of Constans II, has recently been examined by several numismatists who have reached conflicting opinions with respect to the order of striking. Dr. J. P. C. Kent and Mr. P. D. Whitting concur in Wroth's reading of that order, while Mr. Grierson, Mr. Michael Hendy and Mr. R. A. G. Carson believe that the striking was in the reverse order, i.e., that the M follis was overstruck on the Class D follis. In this case also no date could be assigned to the M follis.

Of the Dumbarton Oaks coin (no. 5b of Heraclonas), Mr. Grierson wrote, "the main type is that with *Inper. Const.* but which shows to one side, on both faces of the coin, part of the inscription and types of an *En touto nika* coin. It was first catalogued as an *Inper. Const.* coin overstruck on an *En touto nika* one.[34] A careful reexamination

[32] *D. O. Cat.* II.2, p. 397, no. 5b.

[33] The two classes are differentiated only by the relative order of the exergual markings: Class 1—off, yr.; Class 4—yr., off. This area of the *En touto nika* strike is illegible on the D. O. coin.

[34] By Messrs. Dikigoropoulos and Bellinger.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

by Mr. Hendy and myself showed that it is the other way round. The *En touto nika* part of the coin is much thinner than the *Inper. Const.* one, showing that the second pair of dies hit the previous coin a glancing blow, deeply marking it only over a restricted part of the surface but leaving the earlier type intact over the rest. I believe the same to be true of the other alleged cases of overstriking involving both *Inper. Const.* and *En touto nika* types."[35] Mr. Carson has seen that coin and agrees with Messrs. Grierson and Hendy, but Mr. Bellinger, co-editor of the Dumbarton Oaks catalogue, was not convinced of the validity of this revision in the order of striking.

One important consideration may have been overlooked in this controversy over the order of striking, although Mr. Grierson may have had it in mind when, without disclosing his reasons, he assigned the *En touto nika* "overstrike" on his Heraclonas no. 5b to Constans II's regnal years 1 and 2. An overstrike of an *Inper. Const.* (Class D) follis by an *En touto nika*, M, follis is no proof that Class D was struck for any other emperor than Constans II unless the *En touto nika* follis can clearly be dated to Constans' regnal years 1 or 2. Otherwise, the *En touto nika*, M, follis could have been of years, 4, 5, 6 or 7 and an overstrike on Class D of year 3 would prove only that Class D was not struck for Constantine IV. For example, there is a Class E, *En touto nika*, M, follis of year 6, officina Γ, in my collection (PLATE XXXVII, 15) which was overstruck on a Class D follis. In my collection there is another such follis, but with illegible date, also overstruck on a Class D follis (PLATE XXXVII, 16). The latter was presumably struck in regnal years 3–7 if Class D was an issue of Constans.

Contrariwise, any overstrike on an *En touto nika*, M, follis by a Class D follis, whether or not the date of the *En touto nika* follis can be read, proves that Class D was an issue of Constans II. Besides Wroth's no. 94 and Dumbarton Oaks no. 5b, which some have thought were overstruck on *En touto nika*, M, folles, Mr. Dikigoropoulos reported that in the Kharcha hoard there were two Class D folles which were overstruck on M folles of Constans II. The illustration of the reverse of his coin no. 137 clearly shows that the left leg and serif of the M of the Class D strike were superimposed on the M

[35] *D. O. Cat.* II.2, p. 392.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of the first die. It is difficult to see how this result could have been produced by a "glancing blow" from the M die on the Class D flan. In Mr. Whitting's collection there are also two Class D folles which he believes were overstruck, respectively, on a Constans II Class B follis and on a Class C or early Class A follis. He writes me that Mr. Grierson saw these coins, but must have dismissed them as evidence. He also writes that he has seen numerous other overstrikes which he thought were of Class D over Constans II M folles. In particular, he had recently seen another Class D follis which was very clearly overstruck on a Constans II Class B follis. In my collection there is a Class D follis to which Mr. Grierson has referred.[36] Although Mr. Bellinger and I can see traces, admittedly slight, of an M below the M on this follis, Mr. Grierson's examination of the coin left him unconvinced.

A recent acquisition of mine, however, should dispel all doubt concerning the order of striking of the *Inper. Const.* (Class D) and *En touto nika* types. In this instance the Class D strike was clearly made over a Constans II M follis (PLATE XXXVII, 17). Similar to Mr. Grierson's description of the Dumbarton Oaks coin (Heraclonas no. 5b), the part of my coin on which the impression of the *En touto nika*, M, die can be seen on both faces of the coin is very slightly thinner than the major part impressed by the Class D dies. If that part had not been slightly thinner, of course, the *En touto nika* die impression would have been obliterated by the Class D strike.

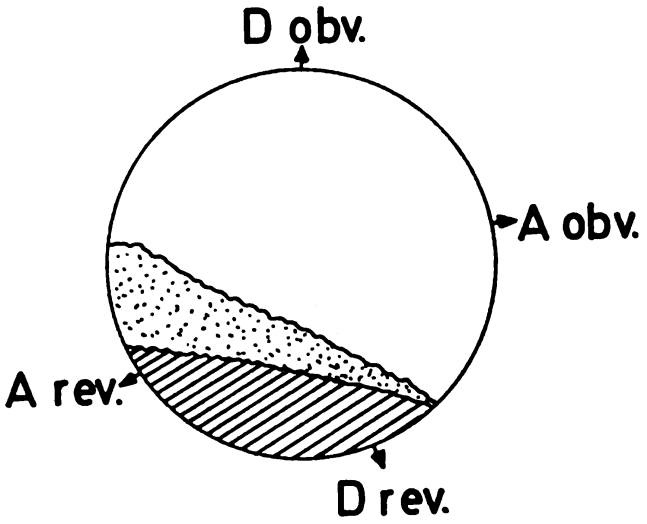
The axes of the four dies on my coin are shown in the following diagram, in which the *En touto nika* dies are denominated "A" and the Class D dies, "D", and shown as though the coin were transparent. The total shaded section indicates the part of the obverse of Class D on which the *En touto nika* reverse shows; and the heavier shaded portion, that part of the Class D reverse on which part of the *En touto nika* obverse is visible. The diameter has been doubled.

Since Mr. Grierson dismissed all "other alleged cases of overstriking" as being the result of *En touto nika* dies striking a Class D flan a "glancing blow," I have sought an objective and definitive test to apply to my overstruck coin. Mr. Grierson's conclusions with respect to the order of striking were based upon visual, subjective

[36] *D. O. Cat.* II.2, p. 392, note 14.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

examination of the British Museum and Dumbarton Oaks coins. To avoid any error of judgment, ceramic dies were prepared from Class A and Class D coins which had not been marred by overstriking and which had obverse and reverse types equal in size to those of my



coin. Then two sets of plasticine flans of the same size as my coin were prepared. One set was of uniform thickness, and the other was slightly tapered in thickness to conform to the flan of my coin. Half the flans from each set were then impressed with the Class D dies, and the other half with the Class A dies. Then Class A dies were overstruck on Class D flans, and Class D dies on Class A flans. In making these tests the plane of the overstriking reverse die was in some instances parallel to and in others at various angles to the plane of the original die impression. This was done in an attempt to reproduce the results shown on my overstruck coin. That result was never achieved by overstriking the Class A dies on the Class D flans, but was easily attained by overstriking the Class D dies on the Class A flans.

This series of tests proved that my Class D follis was overstruck on an M follis with *En touto nika* legend, as visual examination had indicated; and this, corroborating other evidence, proves that Class D was struck for Constans II, not Heraclonas.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

OTHER COPPER COINS ATTRIBUTED TO HERACLONAS

On the basis of his belief that Heraclonas adopted the name *Constantine* for his coinage, and the conclusions which he reached respecting the overstriking of the Class D folles of Constantinople, Mr. Grierson also transferred certain beardless, facing bust types of other mints from Constans II to Heraclonas.

Having attributed Class D of Constantinople to Heraclonas, he naturally assigned the Sicilian *Inperi. Const.* type to Heraclonas also. These folles, closely linked in style to the Class D folles, but having an uncial M for mark of value and no date, must have been struck for the same emperor as were the Class D folles; and hence should be attributed to Constans II (PLATE XXXVII, 21). In his review of volume II of the Dumbarton Oaks catalogue Mr. Bendall wrote, "There are very similar [to Class D] coins issued for Sicily which P. Grierson thinks were also produced in Constantinople for shipment to the west, so alike is their style. This seems very likely but surely is another indication that the issue belongs to the reign of Constans for a sole provincial issue in Sicily in such a short reign is even more unlikely than a metropolitan one."[37]

Mr. Grierson also ascribed to Heraclonas a rare dodecanummium of Alexandria[38] which Mr. Phillips had assigned to Constans II.[39] Mr. Phillips' attribution was probably the correct one. The follis and half-follis of Ravenna illustrated by Tolstoi (Tolstoi nos. 193 and 197) which Mr. Grierson attributed to Heraclonas are also probably issues of Constans II as Tolstoi believed. Mr. Grierson may have been inconsistent in not transferring several Carthaginian beardless bust types to Heraclonas, but they unquestionably do belong to Constans (PLATE XXXVII, 19–20).[40]

[37] S. Bendall, *Num.Circ.* 1970, p. 56.
[38] *D. O. Cat.* II.2, no. 7.1, pl. 23, a coin from the Whittemore Collection at the Fogg Art Museum on temporary loan to Dumbarton Oaks.
[39] J. R. Phillips, "The Byzantine Bronze Coins of Alexandria in the Seventh Century," *NC* 1962, pp. 225–241.
[40] See Note 27 above.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

CORRIGENDA

G. E. Bates, "A Byzantine Hoard from Coelesyria," *ANSMN* 14 (1968):

p. 79, Seleucian coin no. 2, read "Standing figures type" instead of "Two-busts type" (cf. pl. XVII, C);

p. 108, coin no. 264, change $\frac{\text{X}\quad\text{X}}{\text{II}\quad\text{I}}$ to $\frac{\text{X}\quad\text{X}}{\text{I}\quad\text{I}}$ and omit reference to "R. 1473."

G. E. Bates, "Five Byzantine Notes," *ANSMN* 16 (1970), Note 3, "The Antioch Mint under Heraclius:"

p. 82, the speculative second paragraph should be omitted, for the defeat of Heraclius' army at Antioch must have occurred in 613 (as originally indicated by Sebêos,[41] accepted by Ostrogorsky,[42] and confirmed by Balty's analysis of the literature and the campaigns[43]) and not in 622 as given in Macler's annotation[44] and adopted by Downey.[45]

p. 82, note 18, editorial insertion: It should be pointed out that the Istanbul and Apamean folles, though representing the same emperors (Heraclius and Heraclius Constantine) and marked for the same mint (Antioch), are quite dissimilar in design and workmanship.

p. 83, parenthetical reference in second line of beginning paragraph, read "(coins 2 and 5 as compared with coins 1, 3 and 4)" instead of "(coin 5 as compared with coins 1–4)."

[41] Sebêos, *Hist. d'Héraclius*, 24.67 (trans. F. Macler, Paris, 1904).
[42] C. Ostrogorsky, *Hist. of the Byzantine State*, 2.86 (trans. J. Hussey, Rutgers, 1957).
[43] J. C. Balty, "Un follis d'Antioche daté de 623/624 et les campagnes syriennes d'Héraclius," *SM* 20 (1970), p. 8 and citations in note 3, p. 4.
[44] Sebêos, *Hist. d'Héraclius*, annotation 3.
[45] G. Downey, *Hist. of Antioch in Syria from Seleucus to the Arab Conquest* (Princeton, 1961), p. 575.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

COINS FROM THE EXCAVATIONS AT AG. PETROS, HERAKLEION, CRETE

(PLATE XXXVIII)

GEORGE C. MILES

During the month of May 1967, the writer and Dr. Manolis Borboudakis, Ephor of Byzantine Antiquities in Crete, conducted test excavations in Herakleion with the aim of discovering traces of the Arab occupation of Crete, ca. A.D. 827–961.[1] The site chosen was a vacant lot of land lying between the ruined late 13th century Venetian church of Ag. Petros (San Pietro) and the road which runs along the waterfront just inside the sea wall.[2] The area lies within the Byzantine walls of the city and hence probably within the Arab walls, which according to Byzantine sources underlay the Byzantine walls built after the reconquest of the island by Nicephorus Phocas in 961.

Several trenches were dug down to bedrock, approximately six meters beneath the surface and roughly one meter above sea level. No significant architectural remains were uncovered, but a large number of sherds, fully recorded, photographed and described, reflected the Turkish, Venetian, Byzantine (10th to 13th centuries) and Arab occupations. At the bottom the Arab level was identified by pottery and a few coins of the Arab Amirs of Crete. Altogether 53 coins were found, ranging in date from modern Greek to Greek Imperial Times.[3] Trenches A, A2 and C were located in the open area

[1] The excavations were carried out on behalf of the Greek Antiquities Service in cooperation with the American School of Classical Studies in Athens. Expenses were partially met by a generous grant from the American Philosophical Society. The writer and Dr. Borboudakis were assisted by Miss Joan E. Fisher, Mrs. Theodora Stillwell MacKay, Miss Jean Stover (now Mrs. Malcolm Holzman), and Mr. Andoni Papadakis, foreman.

[2] For brief accounts of the excavations see G. C. Miles, "Test Excavations for Arab Remains in Herakleion, Crete," *Year Book of The American Philosophical Society*, 1968, pp. 643–645; and Emm. Borboudakis, Βυζαντινὰ καὶ Μεσαιωνικὰ Μνημεῖα Κρήτις, Ἀρχαιολογικὸν Δελτίον, 23 (1968), pp. 427–429.

[3] The coins were cleaned by Kostas Nikakis of the Herakleion Archaeological Museum staff. In the writer's report in the *APS Year Book* the total number of coins is given as 51; in this calculation two of the three unidentifiable coins (nos. 51–53) were omitted.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

north of the church; Trench B, immediately to the west of the west end of the church; Trench CP-A and Trench CP-AA, within the nave of the church. Depths indicated are beneath the surface.

GREEK IMPERIAL (?)

1. *Bronze.* Rhodes (?). Imperial Times.
Æ 18 mm. (PLATE XXXVIII, 1).
Obv.: Helius head, r.
Rev.: Standing figure (Zeus?), r., holding scepter. Traces of legend at r.
C 38, Trench A, E-3, fill from Grave 4, 5/17/67, from sieve, approx. – 3.95 m.

Miss Margaret Thompson has kindly provided the writer with the following note on this very poorly preserved coin: "The obverse resembles the Helios head found on some early imperial issues of Rhodes but the reverse type was apparently not used by that mint. Bronzes of Antiochus IV struck at Antioch have the radiate head-Zeus with scepter combination. The condition of the coin makes certain identification difficult."

ROMAN

2. *Sestertius.* Lucius Verus, ca. A.D. 169.
Æ 31 mm. (PLATE XXXVIII, 2).
Obv.: Head of Divus Verus, bare, r. DIVVS V.....
Rev.: Eagle standing front on starred globe, body inclined r., head turned l. Traces of legend.
Cf. *BMC* IV, p. 611, no. 1359.
C15, Trench CP-A, 5/15/67, fill, approx. – 3.40–5.00 m.

This coin was found in the fill of a pit, excavated within the church of Ag. Petros, which surprisingly contained a number of sherds of proto-geometric pottery (9th c. B.C.).

3. *Bronze.* House of Constantine, Gloria Exercitus 2-standard type, A.D. 330–335. Æ 16 mm.
Obv.: Head r., traces of legend around.
Rev.: Two standing figures between standards. Traces of letters beneath exergual line.
C50, Trench C, 6/2/67, from sieve, approx. – 5.33 m.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

For this attribution the writer is indebted to Mr. J. P. C. Kent, who kindly examined the photograph and plaster cast of this very obscure specimen in June 1970.

DUKES OF ATHENS (?)

4. *Denier tournois*. Guy II de la Roche (?), 1287–1308. Bil., 19 mm. (broken, mended), (PLATE XXXVIII, 3).
   Obv.: [Cross]. Traces of large-lettered legend around.
   Rev.: Stylized castle. Traces of legend around: ....IVI....
   Cf. G. Schlumberger, *Numismatique de l'Orient Latin* (Paris, 1878), pl. XIII, 4ff., p. 339.
   C11, Trench A, E-4, Grave 1, 5/15/67, approx. – 3.80 m.

BYZANTINE

5. *Follis*. Justinian I, Cyzicus, A.D. 538 and later. Æ 25 × 30 mm., fragmentary.
   Obv.: Traces of facing bust, in helmet with plume, diadem and cuirass. To r. ANVSPP....
   Rev.: Traces of M; in exergue, KYZ. Trace of date to r.
   Cf. *BMC* I, pp. 49–51, nos 233ff.; A. R. Bellinger, *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection*, I (Washington, D.C., 1966), pls. XXXI–XXXIV, pp. 124ff.
   C49, Trench A2, E-3/4, from sieve, approx. – 5.00–5.62 m.

This fragment was not cut or broken in the course of excavation; might it perhaps have been cut for small change in post-Justinian times?

6. *Half tetarteron*. Manuel I, A.D. 1143–1180, uncertain mint. Æ 15 mm.
   Obv.: Monogram, of which only ✝ preserved.
   Rev.: Bust of emperor, facing, holding in r. hand labarum cruciger on long shaft, in l. globus cruciger.
   Cf. *BMC*, II, pl. LXX, 18–19, p. 580, nos. 79–85; Michael F. Hendy, *Coinage and Money in the Byzantine Empire*, 1081–1261 (Dumbarton Oaks, Washington, D.C., 1969), pl. 18, 1, p. 121.
   C46, Trench A2, E-3/4, 5/30–31/67, sieve, approx. – 4.75 m.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

7. *Tetarteron*. Probably Manuel I, A.D. 1143–1180, Constantinople (?). Æ 16 mm.
Obv.: Traces of facing bust of Christ (?).
Rev.: Traces of facing bust of emperor.
Cf. *BMC* II, pl. LXX, 17, p. 579, nos. 75ff.; Hendy, pl. 17, 5, p. 119. Mr. Hendy, who kindly studied the photograph of this obscure specimen in June 1967, concluded that the coin was to be attributed either to John II or to Manuel I, probably the latter.
C45, Trench B, 5/31/67, sieve, approx. – 2.65–3.36 m.

8. *Tetarteron* (?). Mid-12th c. (?). Æ 17 mm.
Obv.: Effaced.
Rev.: Facing bust, more than half figure, long pendant tassels hanging from crown, scepter (?) in right hand.
C51, Trench B, Grave 2, 5/31/67, approx. – 2.68–3.35 m.

9. *Tetarteron*. Mid-12th c. (?). Æ 16 mm., slightly scyphate, fragmentary.
Obv.: Effaced.
Rev.: Traces of facing head.
C52, Trench CP-AA2, 6/2/67, approx. – 0.30 m.

10. *Tetarteron* (?). Probably 1st half of 13th c. Æ approx. 17 mm., fragmentary. (PLATE XXXVIII, 4).
Obv.: Effaced.
Rev.: Traces of three letters, downward.
Three fragments of the coin were found together: one fragment had almost no core and disintegrated in cleaning; the second small fragment bore nothing recognizable; the third had traces of letters.
C42, Trench A2, E-3, 5/26/67, sieve, approx. – 5.29–5.54 m.

The writer owes the attribution to Mr. Hendy who kindly examined photographs and plaster casts of the fragments in June 1967.

ARAB AMIRS OF CRETE

11. *Fals*. Shu'ayb and 'Umar, ca. 250–281 H./ca. A.D. 864–895. Æ 20 mm. (PLATE XXXVIII, 5).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv.	*Rev.*
لا اله الا	محمد
الله وحد [ه لا]	رسول
شريك [له]	الله
عمر	[ش]هيب

Double beaded border Traces of beaded border

G. C. Miles, *The Coinage of the Arab Amirs of Crete, ANSNNM* 160, (New York, 1970), Class K, no. 32.

C 54, Trench A2, E–3/4, 5/31/67, sieve, approx. –5.50m.

This specimen was found firmly adhering to a sherd of unglazed red ware with wheel ridges, of indeterminate date. The pottery at this level ranged in date from the 9th to the 12th centuries and included sherds probably to be identified as Islamic.

12. *Fals.* Shu'ayb and 'Umar (?), ca. 250–281 H./ca. A.D. 864–895. Æ 19mm.

Probably similar to no. 11, above, but both sides mostly effaced.

Miles, *Amirs of Crete*, Class K, no. 31.

C48, Trench B, 5/29/67, sieve, approx. – 4.82m.

13. *Fals.* Anonymous (?), Iqrīṭish (?), 3rd c. H./9th c. A.D. Æ 17mm. (PLATE XXXVIII, 6).

Obv.	*Rev.*
لا اله الا	[ض ب ؟] هذ[ا]
لله محمد [ر]	الفلس [با؟]
سول الله	[قريطش؟]

Single linear border Single linear border (?)

Miles, *Amirs of Crete*, Class W, no. 1.

C53, Trench A2, Wall A, E-4, 6/2/67, approx. –5.50 m.

Only one other specimen of this type is known, in the collection of Mr. Nikolaos Metaxas in Herakleion. Mr. Metaxas' specimen, although very poorly preserved, is a good deal better than this hopeless excavation specimen.

14. *Fals.* Amir of Crete? Æ 22 mm. (corroded and disintegrated in center).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Nothing legible, but traces of double (?) beaded border on one side; fabric similar to Arab coins.

Miles, *Amirs of Crete*, Class Y (unidentifiable), no. 7.

C55, Trench A2, E-3/4, 5/31/67, sieve, approx. −5.17–5.35 m.

15. *Fals*. Amir of Crete? Æ 20 mm.

Fabric suggested Arab; no core and the coin disintegrated in the bath.

Miles, *Amirs of Crete*, Class Y, no. 6.

C47, Trench B, 5/29/67, sieve, approx. −4.80–5.00 m.

VENETIAN

16. *Tornesello*. Antonio Venier, A.D. 1382–1400. Æ 16 mm.

Obv.: Cross. Around: +ANTON....RIODVX·

Rev.: Winged lion. Around: +VEXILIF....ENETIA·

N. Papadopoli Aldobrandini, *Le Monete di Venezia* (Milan, 1893–1919), pl. XIII, 11, Vol. I, p. 231, no. 7.

C43, Trench B, 5/30/67, approx. −3.17 m.

This coin was found stuck together with C44 (no. 17, below).

17. *Tornesello*. Antonio Venier. Æ 16 mm. (PLATE XXXVIII, 7).

Similar to no. 16, above, but legends: +ANTONEVENE-RIODVX· and +.....FVENETIAD

C44, Trench B, 5/30/67, approx. −3.17 m.

This coin was found stuck together with C43 (no. 16, above).

18. *Tornesello*. Probably Agostino Barbarigo, A.D. 1486–1501. Æ 14 mm. (PLATE XXXVIII, 8).

Obv.: Cross, pellets in four quarters. Around: AV....DVX

Rev.: Winged lion. Around: +·S·MAR.....VENETI

Papadopoli, pl. XXI, 6, Vol. II, p. 83, no. 64.

C25, Trench A, E-3, Grave 5, 5/16/67, approx. −3.63 m.

19. *Tornesello*. Probably Leonardo Loredan, A.D. 1501–1521. Æ 14 mm.

Obv.: Cross. Around: LE.....DVX

Rev.: Winged lion. Legend effaced.

Cf. Papadopoli, pl. XXII, 14, Vol. II, p. 114, no. 79, p. 114, nos. 81–82, "croce senza bisanti."

C20, Trench A, E-4, Grave 5, 5/16/67, approx. −3.63 m.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

20. *Tornesello*. Andrea Gritti, A.D. 1523–1538. Æ 13 mm. (PLATE XXXVIII, 9).
Obv.: Cross, pellets at points and in four quarters. Around: •ANDR.....RITI.DVX
Rev.: Winged lion. Around: +S•MARCVS•VENETI
Papadopoli, pl. XXIV, 13, Vol. II, p. 171, no. 174.
C21, Trench A, E-4, Grave 5, 5/16/67, approx. – 3.07 m.

21. *Tornesello*. Early 16th c. Æ 13 mm.
Obv : Traces of cross.
Rev.: Traces of winged lion.
Cf. C20 (no. 19, above).
C23, Trench A, E-4, Grave 5, 5/16/67, approx. – 3.67 m.

22. *Tornesello*. Ca. A.D. 1501–1556. Æ 14 mm.
Obv.: Cross, pellets at points and in four quarters. Legend effaced.
Rev.: Winged lion. Around: .....*NE
Cf. Papadopoli, pl. XXII, 14, XXIII, 7, XXIV, 13, XXVI, 6 and XXIX, 2.
C13, Trench A, E-4, Grave 1, 5/15/67, approx. – 3.81 m.

23. *Tornesello*. Ca. A.D. 1501–1556. Æ 12 mm. (fragmentary).
Obv.: Traces of cross, pellets at points and in four quarters. Legend effaced.
Rev.: Traces of winged lion. Legend effaced.
Cf. C13 (no. 22, above).
C24, Trench A, E-4, Grave 5, 5/16/67, approx. – 3.47 m.

24. *Sesino* (or *doppio quattrino*). Nicolò da Ponte, A.D. 1578–1585. Æ 17 mm. (PLATE XXXVIII, 10).
Obv.: Cross (*pisana*), pellets in four quarters and 12 pellets around. Around: NICOLAVS....DVX
Rev.: Winged lion. Around: *SANCT.....VENETVS
Cf. Papadopoli, pl. XXXVII, 7, Vol. II, p. 376, no. 110.
C29, Trench A, E-3, 5/20/67, from earth above Graves 3, 4 and 6 piled on retaining wall level from 5/8–13/67.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

25. *Sesino* (or *doppio quattrino*). Marino Grimani, A.D. 1595–1605. Bil. 18 mm.
Obv.: Cross (*pisana*), surrounded by 16 pellets. Around: +MARINVS·GRIMANO·DVX...
Rev.: Traces of winged lion. Around: .....RC.....
Cf. Papadopoli, pl. XLIII, 5, Vol. II, p. 453, no. 109.
C34, Trench A, E-4, Grave 5, 5/17/67, approx. – 3.85 m.

26. *Sesino* (or *doppio quattrino*). Marino Grimani. Bil. 18 mm.
Similar to C34 (no. 25, above). Legends: ....·GRIMANO·DVX and ✱.....CT.....RC.....
C57, Trench CP-AA2, 6/3/67, approx. – 1.37 m.

27. *Tornesello*. 16th c.? Æ 14+ mm., fragmentary.
Almost entirely effaced.
C37, Trench A, E-3, 5/23/67, approx. – 5.17 m.

28. *Doppio bagattino*. Leonardo Dona, A.D. 1606–1612. Æ 14 mm. (PLATE XXXVIII, 11).
Obv.: Cross, stars in the four quarters. Around: LONAR· DONA....
Rev.: Facing head. Around: S· MARCVS· VENET.....
Cf. Papadopoli, pl. LVI, 2, Vol. III, p. 41, nos. 115–116, var.
C8, Trench A, E-4, Grave 1, 5/13/67, approx. – 3.52 m.

29. *Soldino* (or 4 *tornesi*). Anonymous, A.D. 1610 and later. Æ 18 mm. (PLATE XXXVIII, 12).
Obv.: Winged lion; star at each side. In exergue: T 4
Rev.: ✱
SOL
DINO
✱◎✱
Cf. Papadopoli, pl. CL, 4, Vol. III, p. 966, no. 41, var.; decree of 9 Oct. 1610.
C3, Trench A, E-4, Grave 1, 5/13/67, among bones, approx. – 3.27–3.17 m.

30. *Soldino* (or 4 *tornesi*). Anonymous, A.D. 1610 and later. Æ 20 mm. Similar to C3 (no. 29, above).
C5, same location as C3, approx. – 3.37 m.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

31. *Soldino* (or 4 *tornesi*). Anonymous, A.D. 1610 and later. Æ 20 mm. Similar to C3 (no. 29, above).
C18, Trench A, E-3, Grave 1, 1.15 m. below top of grave wall.

32. *Soldino* (or 4 *tornesi*). Anonymous, A.D. 1610 and later. Æ 20 mm.
Obv.: Winged lion; star at each side. In exergue: ·T·4·
Rev.: Similar to C3 (no. 29, above).
Cf. Papadopoli, pl. CL, 5, Vol. III, p. 967, no. 46, var.
C19, Trench A, E-3, Grave 1, 5/16/67, approx. 1.15 m. below top of grave wall.

33. *Soldino* (or 4 *tornesi*). Anonymous, A.D. 1610 and later. Æ 20 mm. (PLATE XXXVIII, 13).
Similar to C19 (no. 32, above).
C31, Trench A2, E-4, Grave 1, 5/22/67, approx. −2.42 m.

34. *Soldino* (or 4 *tornesi*). Anonymous, A.D. 1610 and later. Æ 18 mm.+, fragmentary.
Largely effaced, cf. C3 (nos. 29ff., above)
C33, Trench A, E-4, Grave 1, from sieve.

35. *Soldino* (or 4 *tornesi*). Anonymous, A.D. 1610 and later. Æ 19 mm.
Similar to C3 (no. 29, above), details obscure.
C16, Trench A, E-4, Grave 2, 5/15/67, approx. −4.03 m.

36. *Two and one half soldini* (or 10 *tornesi*). Anonymous, A.D. 1611 and later. Æ 24 mm. (PLATE XXXVIII, 14).
Obv.: Winged lion, rosettes at each side. In exergue: T·10·
Rev.: SOLDINI
2½
Chain border
Cf. Papadopoli, pl. CL, 2, var., Vol. III, p. 963, no. 13 (not illus.). Decrees of 15 Jan. 1611, 16 July 1615 and 12 March 1619.
C4, Trench A, E-4, Grave 1, 5/13/67, approx. −3.47 m.

37. *Thirty tornesi* (or 2 *soldi* for Candia). Giovanni Corner I, A.D. 1625–1629. Æ 26 mm. (PLATE XXXVIII, 15).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv.: ✱◎✱
TOPNEΣIA
TPIANTA
◎
Around: IΩAN·KOPNHΛIOS O ΔOY[Ξ]
Rev.: Winged lion. Around: ✱O AΓIOΣMAPKOΣ In exergue: ✱II✱
Papadopoli, pl. LXIX, 2, Vol. III, p. 195, no. 145. See pp. 170–171 for the order to issue these *grossetti* and *soldi* for Candia (letters dated 1625, 1626 and 1627).
C7, Trench A, E-4, Grave 1, 5/13/67, approx. −3.52 m.

38. *Soldo per Candia.* Anonymous, A.D. 1652–1654. Æ 23 mm. (PLATE XXXVIII, 16).
Obv.: Winged lion and sword. Around: SANCTMARCVEN.
In exergue: ◎I◎
Rev.: ✱◎✱
CANDIA
✱◎✱
In exergue: ·FR·
Cf. Papadopoli, pl. CL, 11, but FR, for Francesco da Riva, who was *massaro*, 1652–1654 (cf. Vol. III, p. 969, no. 62, pl. CL, 10, the similar *gazzetta*); decree of 9 Aug. 1643.
C2, Trench A, E-4, Grave 1, 5/13/67, approx. − 2.97 m.

39–48. *Probably torneselli.* 14th–16th c. Æ 11–18 mm.
Ten obscure and fragmentary coins from Trench A and Trench A2, Graves 1, 3 and 5.
C6, 9, 10, 12, 17, 22, 35, 36, 39 and 41.

OTTOMAN

49. *Five piastres.* 'Abd ül-Mejīd, 1255 H.: 20/A.D. 1857/8. Æ 21 mm. (holed).
C1, Trench A, 5/8/67, approx. − 0.17 m.

KINGDOM OF GREECE

50. *Five lepta.* George I, A.D. 1878. Bordeaux mint. Æ 25 mm.
C27, Trench B, 5/17/67, approx. − 0.20 m.

UNIDENTIFIABLE

51–53. Two illegible coins and one disintegrated in bath, found in Trench A and Trench A2.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE PYLIA HOARD: DENIERS TOURNOIS OF FRANKISH GREECE

(PLATES XXXIX–XLII)

D. M. METCALF

A major hoard of Frankish deniers tournois dating from ca. 1310 was found in the winter of 1968/69 at a locality somewhere between Pylos (Navarino) and Kalamata.[1] Twenty-five hoards of Frankish tournois have previously been described;[2] this new one contains the largest number of such coins ever to be recorded, and is one of the earliest in date of deposit, as well as being the only hoard from the southwestern Peloponnese.[3] The site lies in between two important centers of Frankish affairs in the early fourteenth century. Kalamata castle had been a family residence of the Villehardouin dynasty which ruled Achaia; prince William was born and died there. Guy II de la Roche, the young duke of Athens, made Kalamata his usual residence during the period from 1307, when he was nominated by Philip of Taranto as bailie of the Morea, and his untimely death in October 1308. Pylos was the Frankish Port-de-Junch, or Zonklon, the "port of rushes," for which the Greek name was Avarinos. Nicholas II of St. Omer, lord of half Thebes, built or rebuilt a castle there, on the promontory at the northern end of the bay. He too was bailie of the Morea, from 1287–9.[4] The coins in the Pylia hoard are

[1] The information as to the provenance may be taken to be very reliable.

[2] See D. M. Metcalf, "The currency of *deniers tournois* in Frankish Greece," *Annual of the British School of Archaeology at Athens* 55 (1960), pp. 38–59, for an inventory of 21 hoards (namely the series lettered B to S, plus Peloponnese 1849, Kapandriti 1924, and Sierck); also the Istanbul hoard of 1871, the Naples hoard of 1886, and the Rhodes hoard of ca. 1927 which are summarized for convenience in Appendix IV below. See also C. P. Seltman, "A Hoard of Coins of Frankish Greece," *Num. Circ.* 1964, p. 135.

[3] Cf. the provenances of Xirokhori, and Gastouni (noted briefly by E. Varoukha-Khristodhoulopoulos in *Bulletin de Correspondance Hellénique*, 86 (1962), pp. 417–427.

[4] See W. Miller, *The Latins in the Levant, A History of Frankish Greece (1204–1566)* (London, 1908); and *Essays on the Latin Orient* (Cambridge, 1921), especially pp. 107–109, where it is shown that the name Navarino is derived from εἰς τὸν Ἀβαρῖνον.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

in unusually good condition. There were said to be about 3,300 of them in all, of which 3,157 passed, fortunately, into the hands of a private collector who was visiting the Peloponnese and who understood very well the scientific importance of preserving a record of the complete contents of hoards.[5] He studied all the coins carefully, and prepared the summary of the hoard which is printed here as Table 1. As he did not feel that it was in order for him to publish a report on the find himself, he generously ceded his manuscript notes to the writer, and subsequently, after discussions in London about the evidence that the hoard might yield, he went to considerable trouble to ensure that as much information as possible was made available, by weighing certain coins that were still accessible to him,[6] and by taking direct photographs of the scarce varieties. Selected parcels from the hoard came onto the market in Britain and Switzerland during 1969, and a large part found its way to the United States. Professional numismatists in all these countries were good enough to permit the writer to borrow coins briefly in order to weigh them and record their varieties. In all, a detailed reexamintaion of over a thousand specimens was made in this way, with the intention of studying, from a sufficient number of coins, two topics that have not hitherto received much attention.

The first is the metrology of the series—average weights of the successive types, accuracy of manufacture, a comparison of the work of the three main mints, loss of weight by wear and cleaning, and so on. The Pylia hoard is particularly suitable for this project, for reasons that will be made clear below. The second is the frequency of occurrence of the various dots, annulets, trefoils, and other symbols that are used as initial marks, stops, and ornaments on the coins. Schlumberger listed the varieties known to him very fully,[7] but he did not indicate which were plentiful and which were scarce. Here again, the hoard offers valuable evidence simply because it is so large.

[5] The parcel of 150 or so that was removed is thought to have been a random or uninformed selection.

[6] With the kind concurrence of the collectors in whose cabinets they had found a place.

[7] G. Schlumberger, *Numismatique de l'Orient Latin* (1878); with *Supplément* (1882), is still the standard work of reference.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

	Date	*Schl.*	*Qty.*	%
Latin Princes of Achaia (Morea)				
William II of Villehardouin	1246–78	XII, 11 XII, 12	490	15.6
Charles I of Anjou, king of Sicily	1278–85	XII, 16	129	4.1
Charles II of Anjou, king of Sicily	1285–89	XII, 17	409	13.0
Florent of Hainaut, 2nd husband of Isabel	1289–97	XII, 18	432	13.8
Isabel of Villehardouin (alone)	1297–1301	XII, 19	463	14.8
Philip of Savoy, 3rd husband of Isabel	1301–07	XII, 20	239	7.6
Philip I of Taranto	1307–13	XII, 21	133	4.2
Dukes of Athens				
William I de la Roche	1280–87	XIII, 2	552	17.6
Guy II de la Roche	1287–1308	DVX ACTENAR	5	0.2
		XIII, 7	10	0.3
		XIII, 9	57	1.8
Lords of Epirus (Romania)				
Philip of Taranto	1294–1331	XIII, 20	181	5.8
		XIII, 26	21	0.7
Sebastocrators of Thessaly (Great Wallachia)				
John II Angelus Comnenus	1303–18	XIII, 18	10	0.3
Barons of Karytaina				
Helena Angela	1291–99?	XII, 28	6	0.2
			3137	100
French royal and feudal coins			20	
			3157	

TABLE 1. Composition of the Pylia hoard.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The information from metrology and from the symbols of the Pylia coins will collate with neutron activation studies undertaken jointly by Professor Gordus and the writer and published elsewhere,[8] to suggest that in the reign of Isabel there was a recoinage. The princes of Achaia devalued their currency in order to bring it into line with that of the dukes of Athens, whose deniers tournois were, from ca. 1280 onward, somewhat lighter and were of an alloy containing about 5 or 6% less silver. Their intrinsic value was thus a good 20% less. The two types of coinage mingled together freely in the currency of Achaia as well as of Athens, and were indistinguishable from each other on a cursory inspection. Although one should not underrate the ability of people at that time to tell them apart, it seems likely that something akin to Gresham's Law would have taken effect before long: the "bad" Athenian money would have tended to drive out the "good" Achaian. At the least, the similarity of appearance of the two coinages must have been a thorough nuisance, to the detriment of Achaia rather than Athens. From the *Registri Angioini* we learn that the first deniers tournois in the name of Isabel (sole reign, 1297–1301) were not struck until 1299,[9] that is to say, there was apparently an interval of at least two years in the working of the Clarentza mint, and then, as the histogram shows (Fig. 1), a short period of intense activity. The recoinage of 1299 was probably instituted as part and parcel of the *détente* which was achieved by the betrothal, in that year, of Isabel's daughter Mahaut to Duke Guy of Athens.[10]

The Achaian recoinage of 1299 is the central feature of the monetary history of Frankish Greece which can be illuminated from a study of the Pylia hoard, and the detailed information will be examined below to see how exact it is as evidence for the recoinage. For example, the varieties of initial marks, stops, etc., on the coins

[8] A. A. Gordus and D. M. Metcalf, *Coinage of the Crusading Period: Neutron Activation Studies*, (Minerva Numismatic Handbooks, in preparation).

[9] Schlumberger, p. 316, note 1. Schlumberger incorporates a number of references to the *Registri Angioini* into his text. By an act of gross vandalism the registers were destroyed during the Second World War. They had been studied in part by P. Durrieu, A. de Boüard, J. Longnon, C. Perrat, and others.

[10] See J. Longnon, *L'Empire Latin de Constantinople et la principauté de Morée* (Paris, 1949), p. 2.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of Isabel and of her third husband Philip of Savoy will be compared in order to dismiss the possibility that a significant proportion of the coins in the name of Isabel might have been struck during the years 1301–07.

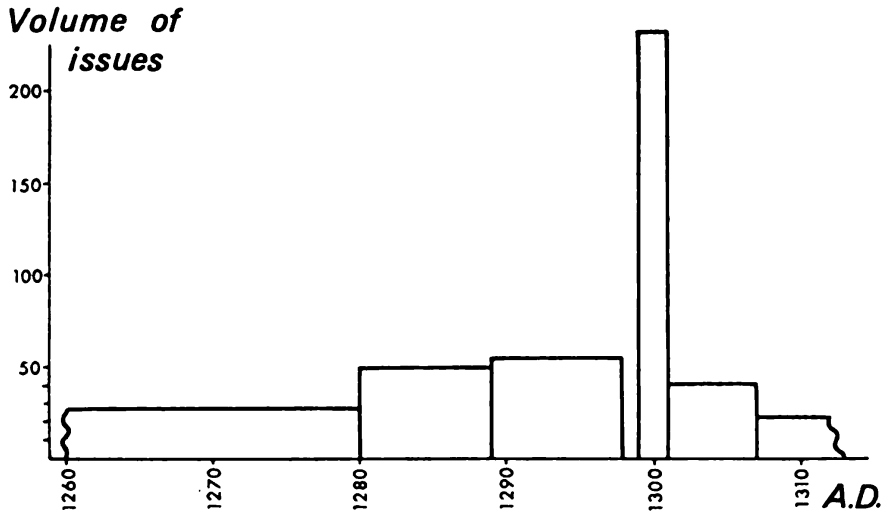


FIG. 1. Histogram to show the volume of Achaian issues in the Pylia hoard (number of coins divided by number of years in the reign). The beginning of William's coinage is set at 1260, for reasons that are given below; and the issues of Philip of Taranto are spread over the whole of his reign, although the hoard may have been concealed before all of them had gained an effective distribution. The Delphi 1929 and Orion hoards reveal the same pattern (with rather fewer of the good silver coins), but suggest that an index of about 10 would be more normal for both Philip of Savoy and Philip of Taranto.

Secondly, an attempt will be made to argue that there was a similar recoinage, associated with a reduction in the weight standard, during the reign of William of Villehardouin, very possibly in 1267, and that the date of origin of the Achaian tournois, on the French royal standard, was some years earlier, perhaps ca. 1260. The evidence for this is mainly metrological, but it finds support from a detailed study of the excavation records at Corinth.

Thirdly, among the Athenian coins in the Pylia hoard there is a related series of four scarce varieties that begins in the reign of William and runs over into that of Guy II. The style of lettering is

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

quite distinctive, and the varieties are characterized by trefoil stops. It seems possible that they should be interpreted as issues for the use of the bailies of the Morea, William de la Roche (1285–87) and Nicholas of St. Omer (1287–89).

Finally, the hoard is notable for the number of scarce coins of John Angelus, Helen Angela, and "Guiot" which it contained. These, and the 20 French coins, are published and illustrated in full.

STYLISTIC ANALYSIS OF THE VARIETIES

Achaia. The early Achaian tournois show a curious alternation in the use of a barred and an unbarred letter **A**. On the coins reading **G.PRINCEPS** the **A** is almost always unbarred; on those with **G.PRINCE.ACh** it is barred; on coins of Charles I it is again barred; but on those attributed to Charles II it reverts invariably to the unbarred form. In the reign of Florent three forms of **A** are used separately on three varieties of coinage, and in the sole reign of Isabel two are used. No explanation can yet be given for the varying form of the letter **A**. The publication of hoards concealed during the reigns of Florent or Isabel may eventually suggest an answer.

William II of Villehardouin, 1246–78. The attribution of two substantive types reading **G.PRINCEPS** (Schlumberger pl. XII, 11) and **G.PRINCE.ACh** (XII, 12) to William is confirmed by the Xirokhori hoard, in which there were 152 and 127 specimens respectively.[11] The style of the châtel shows that XII, 11 is the earlier of the two: the triangular gable-end or "tower" is, precisely, a triangle of three equally thin lines, and there are either two dots or three dots arranged in a triangle in the space beneath. On later coins the "tower" is more like an inverted letter V, with variation in the thickness of the strokes, and with seriffing, and there are three dots in a straight line in the space beneath (compare Fig. 2, a and b). The scarce **G.PRINCEPS** coins with version b of the châtel normally have the letter **A** barred, as in the succeeding type, but their chronology is problematic, as will be seen later when the metrology of the **G.PRINCEPS** issue is studied. A specimen[12] illustrated on

[11] Metcalf, *ABSA* 1960, p. 54.
[12] .922 gr. Ashmolean Museum.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

PLATE XXXIX, 1 has the "late" châtel, barred **A**'s, reversed **N**'s, and a recumbent **S**, with rosette marks.

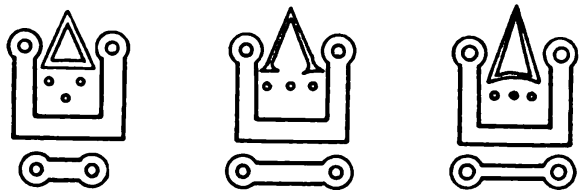


FIG. 2. The various styles of châtel on Achaian tournois: William, Charles I, and Charles II.

Schlumberger listed ten varieties of the **G.PRINCEPS** type, and in addition one with retrograde legends and another with blundered legends. They show various combinations of dots, rosettes, and crescents. The most plentiful in the Pylia hoard are:

	Proportion in sample
a) ·✠· **G·PRINCEPS / :✠: CLΛRENTIΛ** (PLATE XXXIX, 2)	25%
Includes variant with :✠: and **N**, **N**	
b) ·✠· **G·PRINCEPS / ›:✠:‹ CLΛRENTIΛ** (PLATE XXXIX, 3)	21%
c) ·✠· **G·PRINCEPS / ⊚✠⊚ CLΛRENTIΛ**	35%
:✠: **G·PRINCEPS / ⊚✠⊚CLΛRENTIΛ**	
The two variants are about equally common; the second sometimes with recumbent **S**, reversed **N**, barred **A**.	
d) ⊚✠⊚ **G·PRINCEPS / ⊚✠⊚ CLΛRENTIΛ**	5%
e) ·✠· **G·PRINCEPS / ·✠·CLΛRENTIΛ**	6%
"Tower" with only two dots in space beneath.	
f) Other varieties. (A specimen[13] with :✠⊚ **G·PRINCEPS** and a different form of crescent stop on the reverse is illustrated at PLATE XXXIX, 4.	8%

Note that the stop at the end of the legend has in each case been transcribed before the initial cross. The proportions are necessarily approximate, as they are derived from a one-third overall sample of the hoard. The validity of the sample is discussed in Appendix I.

[13] .951 gr.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

There is no overlap between these and the varieties that occur most plentifully with **G.PRINCE.ACh**:

a) ✠: G:PRINCEACh / ᴰ✠▾ CLARENTIA	(PLATE XXXIX, 5)	26%
b) ✠· G·PRINCEACh / ·✠▾ CLARENTIA		24%
c) ✠· G·PRINCEACh / ▾✠: CLARENTIA		21%
d) ✠: G:PRINCEACh / ▾✠▾ CLARENTIA		19%
e) Other varieties.		10%

Thus, there are apparently seven or eight common varieties from William's reign, which together account for 85–90% of the currency. Some of the remaining coins may be from dies on which the marks were varied merely by inadvertence, or in ways which seemed to the die sinker to be of no consequence; some may be mules which would serve to put the varieties into chronological order, although this cannot at present be demonstrated. No coins of inferior workmanship, such as might be counterfeits, were noticed. The date at which William began to strike tournois will be discussed below.

Charles I and Charles II of Anjou, 1278–85–89. There are two issues inscribed alike **K.R.PRINC'ACh**, which are divided between Charles I and Charles II according to the legend on the reverse—**CLARENTIA** or **DЄ CLΛRЄNTIΛ**. The former (Schl. XII, 16) corresponds with the coinage of William, and the latter (Schl. XII, 17) is similar to that on all later issues of the Clarentza mint. The Pylia hoard confirms that XII, 17 is much the more plentiful of the two. It has been argued elsewhere that, although the sequence is not in doubt, the change to XII, 17 may have been made before the accession of Charles II in 1285.[14] In fact, it was probably in 1281, when Charles's chancellor Gauthier de Collepierre investigated the working of the Achaian mint and made certain reforms;[15] and the traditional attribution of XII, 17 should be corrected in that sense. Schlumberger noted that the style and execution of the **DЄ CLΛRЄNTIΛ** coins seemed to mark them off from the earlier **CLARENTIA** issue. He recorded four varieties reading **CLAREN-**

[14] Metcalf, *ABSA* 1960, p. 54.
[15] Schlumberger, p. 315.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

TIA, of which three are shown by the Pylia hoard to be substantive. The proportions in which they occur are:

a) ✠▾ **K R PRINC'ACh** / ▾✠▾ **CLARENTIA** 16%
b) ·✠· **K·R·PRINC'ACh** / ·✠· **CLARENTIA** 66%
c) ⁘ **K°R°PRINC'ACh** / ⁘ **CLARENTIA** 18%

This is the "new royal coinage" in the name of Charles I, to replace that of prince William, mentioned in the *Registri Angioini*. Among the orders to the treasurers, there is one dated April 20, 1279 authorizing the payment of 500 marks of silver "pour faire d'iceus la monnaie en la contée de Romenie."[16] Another record of the same date shows that 1700 marcs of bronze were to be dispatched for the same purpose; this order was renewed on May 18, 1279. Elsewhere we read that "monseigneur Loys de Roire ... estoit lors envoié par la Court au parties de la Morée pour faire faire ilec la roial nouvelle monoie." De Boüard notes that even after these measures, the mint of Clarentza was unequal to its task, namely to supply the cash to pay the troops in the Morea: in the following year the royal treasury had to send massive sums to Greece.[17]

The second issue is inscribed **DЄ CLΛRЄNTIΛ**. This does not mean "of Clarentza" but *Denarius Clarentianus*—by analogy with the coins of Alphonse of Poitiers inscribed **DE**(*narius*) **RIOMENSIS**. As regards varieties, it is absolutely uniform, with : stops on the reverse. The contrast with all the preceding and following issues in this respect is suggestive of a reform coinage. Schlumberger records a variety with stars in place of the crosses, but this must be, to say the least, rare, since no example was noticed among 150 coins.

Florent, 1289–97. With the accession of Florent, the reverse legend is changed to **DЄ CLARЄNCIA**. There is a marked deterioration in the quality of die sinking and striking. Schlumberger notes numerous varieties, but the Pylia hoard shows that three groups, with symbols that are distinctive to Florent's coinage, are far more plentiful than

[16] A. de Boüard, *Documents en français des archives angevines de Naples (règne de Charles Ier)*. I, *Les mandements aux trésoriers*, (Paris, 1933), pp. 149–150, no. 140.
[17] de Boüard, *Documents*, II, *Les comptes des trésoriers* (Paris, 1935), pp. 33–34.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the rest. The form of the letter **A** is again diagnostic: it is very regularly barred on one main group, unbarred on a second, and unbarred with a characteristic horn-shaped serif on the third. The "horned" **A** can be seen on the specimens illustrated at PLATE XXXIX, 6 and 7.

a) Star on reverse; barred **A**. (The obv. begins ✠:, ·✠·, etc.; rev. *✠, etc.) 22%
b) Obv. legend ends with (?) acorn; rev. ends with (?) nail; unbarred **A**. 48%
c) Rev. **D'CLXRЄNCIX**. 17%
d) Obv. symbols **B✠T** (cf. coins of Isabel). Unbarred **A**. 5%
e) Dots, or no marks 8%

Again, three varieties make up 85–90% of the currency.

Furthermore, the form of the châtel, as well as the letter **A**, differs between the varieties. The triangular gable-end or "tower" is depicted in several distinct styles, as shown in Fig. 3. A full check was not carried out, but the correlation seems to be clear cut.[18] There at present no available evidence to demonstrate whether or

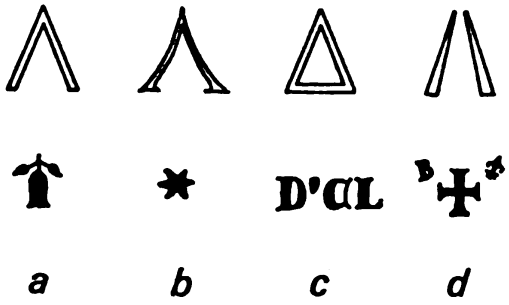


FIG. 3. The various styles of châtel on Achaian tournois: Florent.

not the varieties are chronologically successive. It appears unlikely that such stylistic differences were deliberate: the straightforward reading of the evidence is that there were several die sinkers, each of whom worked regularly for one particular administrative division of the mint, as indicated on the coins by a symbol. The metrology of the coins of Florent, discussed below, shows differences in the

[18] The difference was not noticed until most of the coins had been sent back.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

distribution of weights around the mean which suggest that the same administrative division extended as far as the preparation of the blanks. This feature of the coinage is apparently found only during Florent's reign; Pegolotti's record of the salaries paid by the Clarentza mint indicates that there was more than one mint master (the *Registri Angioini* name them in pairs) but at that date only one die sinker, and it does not supply any useful details about the subdivision of the work.[19]

Isabel, 1297–1301. Isabel of Villehardouin, heiress of the principality of Achaia, was married first to Philip of Anjou, who died in 1277 in his father's lifetime. In 1289 she was married to Florent, and they became, under Philip's brother Charles II, the hereditary prince and princess of Achaia. Isabel received from the crown the barony of Karytaina. The joint reign was marked by hostility with Athens, whose duke refused to pledge loyalty to Florent. The quarrel continued after the death of Florent in 1297, when Isabel became the sole ruler, but was mended by the betrothal of Isabel's daughter Mahaut to Guy II de la Roche. The need for stong leadership in the affairs of the principality led to the marriage, in 1301, of Isabel to Philip of Savoy.

The coins in the name of Isabel are attributed to her sole reign, and the *Registri Angioini* indicate that they were struck in the years 1299–1301.[20] The form of the letter **A** agrees, with great regularity, with the three common marks. A version of the châtel similar to Fig. 3, d is however standard, and there are no significant variations in the average weights of the varieties.

a) Obv. **B**✠⊤, rev. **I**✠; unbarred **A**.	51%
b) Obv. symbols with 3 rays, rev. stars; barred **A**. (PLATE XXXIX, 8)	27%
c) Obv. trefoil at beginning of legend, rev. "nail" at end of legend; unbarred **A**	12%
d) Obv. **C**✠✱, rev. **I**✠; unbarred **A**	4%
e) Obv. various combinations of 3-rayed symbol and/or star, rev. **I**✠.	4%
f) Other varieties (usually with a lis on obv.)	2%

[19] See Schlumberger, p. 312, where Pegolotti's entries are quoted.
[20] Schlumberger, p. 316.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

An interesting counterfeit of a coin of Isabel, from the Pylia hoard, is illustrated at PLATE XXXIX, 9. It is of very neat workmanship, but reads ✠ISΠBΩLL[Π]ΠIΩII and ✠ΩΩJΠI'ΩHΩIΠ✦. The weight, 1.139 gr., is far outside the normal range for coins of Isabel. Indeed, this was the heaviest coin that was noted from the hoard. The style of the châtel, which lacks any dots beneath the triangular "tower," is so closely similar to that on a counterfeit of Philip of Savoy (see below) that it is certainly from the same hand. Its date, accordingly, may be a little later than Isabel's reign.

Philip of Savoy, 1301–07. The letter **A** ceases to be a useful criterion in this reign, being normally barred. Marks beneath and to each side of the châtel are introduced. The varieties are:

a) Large crosses or lilies on either side of the reverse cross; 5-pointed star beneath châtel 46%
b) Fleurs-de-lis beside cross and beneath châtel, dots to either side of châtel 21%
c) Lilies or lis beside cross, 5-pointed star beneath châtel and dots to either side 33%

There is no overlap of varieties between this reign and the preceding one.

Another counterfeit PLATE XL, 17 reads ✠PhƧƎƧΠBPΠΩh' and ✠ƎƐPΠIƐIIƐIΠ:, with a châtel that links it to the coin of Isabel already described.

Philip of Taranto, 1307–13. The coins of Philip of Taranto are the latest Achaian issues in the Pylia hoard. There is at least one substantive variety not represented in the hoard, namely coins with an **E** on each side of the châtel.

a) Trefoils on either side of the reverse cross and beneath the châtel; dots to either side of the châtel 80%
b) **D.CLΛRENCIΛ** (PLATE XXXIX, 10) 20%

A further counterfeit, with a châtel somewhat like the preceding two, but with less characteristic lettering, reads ✠[Ph]SPTΠRDESP and ✠IIΩ·Π·ИTIΩIΠ· (PLATE XL, 18). Here, and also on the coin

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

in the name of Philip of Savoy, there seems to be an intention to combine elements of *De Clarencia* and *Nepanti Civis*; the **P** on the first coin can only derive from *Nepanti*, while the **CIA** on the second comes from *Clarencia*.

Athens. The earliest Athenian tournois were struck at Thebes by William de la Roche in or soon after 1280, when the Achaian billon coinage had already been in circulation for some years. William's coins were fractionally lighter and contained appreciably less silver than the Achaian coins which they copied.

Willam I de la Roche, 1280–87. The coins with the legend **G.DVX** (Schl. XIII, 2 and variants) were the first substantive issue of the Thebes mint, as is shown clearly by the Xirokhori hoard, in which 633 specimens of the type were reported, and no other Athenian issues. Schl. XIII, 3, with ⁘ **G°DVX⊛ATЄNЄS / ✠° ThЄBA-NI⊛CIVIS**, appears to have been a regular issue, since it occurs in small quantities in a number of later hoards. There are around 5 or 6 per cent as many coins of this type as of Schl. XIII, 2. Its complete absence from the Pylia hoard must, therefore, make it doubtful whether it can be dated as early as 1287. It will be noted that the letter Є is lunate, whereas the regular variety with annulet stops always has a square **E**. There were, further, two specimens in the available part of the hoard reading ⁘ **G DVX⊛ATЄHЄS / ⁘ ThЄB⊛CIVIS** and ✠ **G DVX ATЄIIЄS / ⁘ ThЄB⊛-CIVIS** (experimental obverse die?) which seem to stand in close relationship to the coins of Guy reading ⁘ **GVI DVX⊛ATЄNЄS / ⁘ ThЄBANI⊛CIVIS**, also in the hoard, and to Schl. XIII, 3 (⁘ **G°DVX⊛ATЄNЄS / ✠° ThЄBANI⊛CIVIS**). If the latter were struck after 1294 (see below), the two **G.DVX** coins are unlikely to have been struck during William's reign, that is, before 1287. As **G** was the initial of Guy as well as William (Guillaume), coins could well have been struck during his minority (before the legend **GVI** was introduced) on which **G.DVX** was intended to be read as *Gui Dux*. These varieties will accordingly be listed as coins of Guy.

Style and detail are the key to William's coinage. There are three main groups of varieties within the type Schl. XIII, 2. By far the most

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

plentiful of them has double annulet stops, ⁘ G⁘DVX⁘ATENES / ⁘ ThEBE⁘CIVIS. These coins invariably have a characteristic style of châtel with broken annulets (see Fig. 4a). Scarce coins with single dots as stops include some that read ✠·G·DVX·ΛTЄHIS / ▾✠▾ ThЄBI▾ CIVIS as well as the more regular ✠·G.DVX·ATЄNЄS / ▾✠ ThЄBЄ CIVIS. On them, the characteristic version of the châtel has thin, unbroken annulets (see Fig. 4b). Note that the lower annulets are not (as in Fig. 4a) joined to the vertical elements, and that the horizontal bar joining them is aligned with the lower half of the circles. Thirdly, and of especial interest, there are coins with

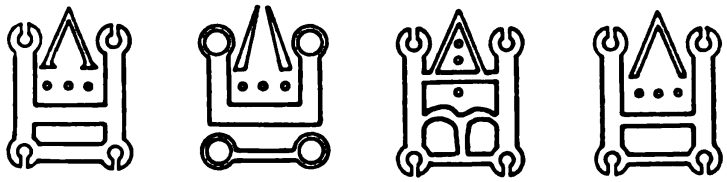


FIG. 4. The various styles of châtel on Athenian tournois.

trefoil stops (more exactly, 3-rayed symbols as on the coins of Isabel) and, in some cases, an entirely distinctive châtel (see Fig. 4c and d) reminiscent of the Athenian copper coinage of an earlier date, which is in turn derived in all probability from the Genoese gateway design. These tournois also have a distinctive style of lettering, and they include specimens with the irregular legends **G.DVX.DATENES / ThEBES CIVIS**. They afford a perfect instance where the "hand" of a particular workman can be recognized.

The proportions of the three groups of varieties are:

a) ⁘ G⁘DVX⁘ATENES	73%
b) ✠ˣ G·DVX·ΛTЄNIS, etc.	13%
c) ⸗✠⸗ G⸗DVX⸗ATENES, etc.	14%

These three groups have somehow to be accommodated into William's reign (1280–87), and there are obvious difficulties in attributing them all to a single workshop. Diversity of style does not necessarily imply diversity of origin (although the reverse is normally true). Nevertheless, it is not easy to imagine that the trefoil-stop series,

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

which begins very experimentally with coins inscribed **G DVX DATENES / ThEBES CIVIS**, could have followed the copious **✠G DVX** issues at the Thebes mint. Nor can it be interpreted as the earliest Athenian issue, for the series runs over into the reign of Guy, to include most or all of the coins inscribed **GVIOT**. For this reason alone, one must reject the traditional attribution of the **GVIOT** type to the regency of Hugh of Brienne. As William was nominated as bailie of the Morea in 1285, and is known to have undertaken building works there, and to have spent liberally, one must consider the possibility that the trefoil-stop coins were struck for use in Achaia and that they belong to the last two years of his reign. Where the coins were struck is problematic. If it was somewhere in Achaia, Nicholas II of St. Omer, who succeeded him as bailie, may for a short time have kept the mint open. He may have considered that he had the right to do so by virtue of precedent. And Guy was a minor (as the legend of the coins pointedly shows), under the tutelage of a woman: the future may well have seemed uncertain.

The evidence that the trefoil-stop coins form a distinct and compact series can be studied in the following list of coins from the Pylia hoard, which shows a gradual transition in the detail of the stops, the legends, and the form of the châtel. Nos. 1–4 and 31–7 were among the scarce coins picked out by the original purchaser of the hoard, while nos. 5–30 make up the 14% listed under c) above.

1. ✠ G DVX:DΛTENES
   ✠ ThEBES:CIVIS
   Note the angular outline of the **D** in **DVX**. The initial stops consist of two trefoils with a dot between. There is apperently only one dot in the "tower" of the châtel, and the double arch is thickly modelled. The variety inscribed **DATENES** was known to Schlumberger only from the Borrell catalogue, no. 1180 (PLATE XL, 1).
2. ✠ G:DVX:DΛTEИES
   :✠ ThEBES CIVIS
   Two dots in the "tower" of the châtel. A dot within the **D** of **DVX** (PLATE XL, 2).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

3. :✠⁝G·DVX:DΛTENES
   ✠⁝ThEBES.CIVIS Châtel similar to no. 2 (PLATE XL, 3).
4. .✠⁝G·DVX:DΛTENES
   .✠⁝ThEBES CIVIS Similar (PLATE XL, 4).
5. ·✠⁝G·DVX DΛTENES
   .✠⁝ThEBES·CIVIS Similar. 0.95 gr. (PLATE XXXIX, 11).

Nos. 1–5 are all from different obverse and reverse dies.

6. ·✠⁝G:DVX:ΛTENES
   ·✠⁝ThEBE·CIVIS
   Note that the obverse and reverse legends are now normal, but that the stops are still experimental, and the châtel is still on the Genoese model. This is an important transitional coin. 0.90 gr. (PLATE XXXIX, 12).
7. ⁝✠⁝G⁝DVX⁝ΛTENES
   ⁝✠⁝THEBE⁝CIVIS 0.78 gr. (PLATE XXXIX, 13).
   The stops have assumed their substantive form.
8. ⁝✠⁝G DVX⁝ΛTENES
   ⁝✠⁝THEBE⁝CIVIS⁝ The double arch of the experimental châtel is replaced by a horizontal line, as in the standard version. 0.96 gr. (PLATE XXXIX, 14).
9–30. Similar to no. 8. 1.01, 0.97, 0.95 (2), 0.94 (2), 0.92 (2), 0.90, 0.86 (2), 0.85 (2), 0.84 (2), 0.83, 0.82, 0.78 (3), 0.76, 0.72 gr.
31. ✠⁝GVIOT⁝DVX⁝ΛTh′
   ⁝✠⁝ThEBE⁝CIVIS Châtel as on no. 8. 0.80 gr. Glendining, Sept. 23, 1970, 334 (incorrectly numbered 337 on the plate) (PLATE XL, 5).
32. Similar. 0.87 gr. (PLATE XL, 6).
33. Similar (initial stop on obv. uncertain). 0.89 gr. (PLATE XL, 7).
34. Rev. reads ⁝✠⁝ThEBE:CIVIS⁝ 0.81 gr. (PLATE XL, 8).
35. Similar. 0.85 gr. Glendining, Sept. 23, 1970, 333 (PLATE XL, 9).
36. Similar. 0.90 gr. (uncleaned) (PLATE XL, 10).
37. :GVIOT DVX:ΛTh
   ⁝✠:ThEBE⁝CIVIS 0.79 gr. (uncleaned) (PLATE XL, 11).

The group of coins of William with single stops, which are less obviously related to each other in style, includes the following specimens. No. 5 is apparently a link between the reverses with

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

triangle stops (nos. 1–4) and the obverses without a cross before the **G** (nos. 6–25).

1. ✠·⁘·G·DVX ΛTЄHIS
   ✠▾ ThЄBЄ▾CIVIS 1.00 gr. (PLATE XXXIX, 16).
2. ⁘✠·G·DVX·ΛTЄHIS
   ▾✠▾ ThЄBЄ ▴CIVIS 0.87 gr.
3, 4. ⁝✠+G·DVX ΛTЄHIS
   ▾✠▴ThЄBЄ▾ CIVIS 0.63 gr. (PLATE XXXIX, 17), 0.92 gr.
5. ·✠· G·DVXΛTЄNЄS
   ▾✠▾ThЄBЄ▾CIVIS 0.96 gr.
6–25. Similar, but with rev. I✠ ThЄBЄ CIVIS 0.94, 0.92, 0.90 (2), 0.89 (2), 0.88, 0.87 (2), 0.86 (2), 0.84, 0.83, 0.82 (2), 0.81, 0.80, 0.79 (2), 0.74 gr.
26. ✠+G·DVX·ΛTЄNIS
   ▴✠∴ThЄBЄ· CIVIS 0.58 gr. (contemporary counterfeit?).

Guy II de la Roche, 1287–1308. When his father died Guy was still a child, and the duchy was governed by his mother Helen Angela as Regent. Helen remarried in 1291, and her husband Hugh of Brienne acted as Regent until Guy attained his majority in 1294. The coins inscribed **GVI DVX ATЄNЄS** are attributed to the period 1294–1308, while various anonymous issues, as well as those (listed above) with the familiar name "Guiot," are assigned to his minority.

The anonymous types recorded (but not all illustrated) by Schlumberger show considerable diversity in the spellings and abbreviations employed, and in their stops. Their numismatic arrangement is still largely an unsolved problem. For ease of reference, they may be provisionally listed as follows:

Type

A-1 ✠ DVX ACTЄNAR′ / ✠ TЄBAR′ CIVIS·
Lambros, pl. VI, 1.

A-2 ·✠· DVX·ATENES / ✠ TЄBAR: CIVIS
Lambros, pl. VI, 2.

A-3 ·✠· DVX·ATENES / ·✠· ThEBE: CIVIS
Lambros, pl. VI, 3.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

B-1 ⁘✠⁘DVX⁘ATЄИЄS / ⁘✠⁘ ThЄBЄ⁘ CIVIS
Lambros, pl. VI, 4; Schlumberger, pl. XIII, 5.
B-2 Similar, but broken annulets in châtel and cross below.
Lambros, pl. VI, 5.

C-1 ✠⁘DVX⁘ATENES / ✠ ThEBA′ CIVIS
C-2 ⁘✠ DVX ATЄNЄS / ✠ ThEBA′ CIVIS
Schlumberger, pl. XIII, 4.

Several of these were published by Lambros in 1874,[21] and it can be seen from his line drawings (reproduced as Fig. 5) that there is a close similarity of style between the reverses of A-1 and A-2, and



FIG. 5. Athenian tournois of Guy II: the anonymous types A-1, A-2, A-3, B-1 and B-2.

also between the obverses of A-2 and A-3: note the change over from Є to E. B-1 and B-2 appear similar to each other, in the seriffing

[21] P. Lambros, "Unedirte Mittelaltermünzen von Athen und Naxos," *ZNum* 1874, p. 192 and pl. VI, 1–5.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

of the V, and the reversed И. B-2 has broken annulets like the earlier coins on William; the little cross beneath the châtel cannot be paralleled among coins struck before 1294. C-1 and C-2 are quite different in the style both of their lettering and of the châtel. There is as yet no definite hoard evidence to prove that they are part of the official series struck during Guy's minority.

To these anonymous types should perhaps be added the problematic coins, mentioned above, with stops similar to those of coins of Guy:

Type

D-1 ⁘ G DVX◎ATЄHЄS / ⁘ ThЄB Є◎ CIVIS

and also the relatively more plentiful, though still uncommon, type

D-2 ⁘ G°DVX◎ATЄNЄS / ✠° ThЄBANI◎ CIVIS

(Schl. XIII, 3).

Varieties A and B are scarce in the published hoards—there were 4 specimens among 183 Athenian issues in the Orion hoard (A-1, 2; A-3/B-1, 2), 2 among 109 in the Elevsis hoard of 1952 (A-1, 1; A-3/B-1, 1), 3 among 716 in Delphi 1894B (A-1, 2; A-3/B-1, 1), and 2 among 413 in Delphi 1894A.[22] D-1 has probably escaped record (it occurs, for example, in the Orion hoard[23]), as has the distinction between A-3 and B-1.

The available part of the Pylia hoard contained 5 specimens of A-1 and 2 of D-1, together with 57 normal issues of Guy (and 10 with the name Guiot). In comparison with other hoards, the absence of A-3/B-1 is thus conspicuous. The explanation may lie hidden in the composition and age structure of the hoard, any comments on which are necessarily speculative. There are surprisingly few coins of Guy's majority in the Pylia hoard, considering that it was concealed 15 or more years after 1294; and the relative proportion of coins from his minority is high. There are unexpectedly many of the scarce issues of John Angelus and Helen Angela: one may guess, therefore, that the **DVX ACTЄNAR'** specimens (A-1) are associated with Helena too, i.e. that they were struck during her regency. The 5 specimens are struck from 4 obverse and 5 reverse dies:

[22] See Metcalf, *ABSA* 1960.

[23] But is not recorded in Metcalf, *ABSA* 1960.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

1. Reversed **S** in **CIVIS**.	0.85 gr., cleaned wt.	Glendining, Sept. 23, 1970, 332 (PLATE XL, 12).
2. Similar.	0.85 gr., cleaned wt.	(PLATE XL, 13).
3. Same obverse die.	0.89 gr., cleaned wt.	(PLATE XL, 14).
4. Normal **S** in **CIVIS**.	0.86 gr., cleaned wt.	(PLATE XL, 15).
5. Similar.	0.83 gr., cleaned wt.	(PLATE XL, 16).

One of the specimens of D-1 is perhaps experimental. Its obverse reads ✠ **GDVXΛTEIIES**. Its weight is 0.96 gr. The legends of the other specimen are as shown, and its weight is 0.88 gr.

The coins assigned to Guy's majority, with the legend **GVI DVX ATENES**, which are the last substantive issue of the Thebes mint, appear to be straightforward as regards their style. The interest of the Pylia hoard is that it was concealed very soon after the end of Guy's reign. Not all the varieties, therefore, may have had an equal chance to find their way from the mint of Thebes to the southern Peloponnese; and the hoard can be expected to exclude any varieties which may have been struck after Guy's death, whether as a *type immobilisé* or as counterfeits. Particular care was taken to distinguish between coins from the Pylia hoard and those from the Acarnania hoard (see Appendix III). The varieties noted in the available part of the Pylia hoard were:

✠ **GVI·DVX · ATENES / ✠ ThEBANI⊙CIVIS**
✠ **GVI DVX⊙ATENES / ✠ ThEBANI⊙CIVIS** (2 specimens)
✠ **GVI DVX⊙ATENES / ✠ ThEBANI⊙CIVIS** (2)
✠ **GVI·DVX · ATENES / ✠ ThEBANI CIVIS**
:✠: **GVI·DVX : ATENES / :✠: ThEBANI : CIVIS** (3) star below
:✠: **GVI·DVX : ATENES / :✠: ThEBANI : CIVIS** without star
:✠: **GVI·DVX : ATENES / ˘✠˘ ThEBANI : CIVIS** (2)
˙✠˙ **GVI DVX ˙ ATENES / ˙✠˙ ThEBANI CIVIS**
✠: **GVI DVX ATENES / ✠˙ ThEBANI : CIVIS**
✠: **GVI·DVX : ATEHES /Ä✠ÄThEBAHI : CIVIS**
(PLATE XXXIX, 18).

Romania: *Philip of Taranto, from 1294.* Charles II's son Philip acquired lands in Epirus by his marriage in September 1294 with Thamar Angela, daughter of Nicephorus I, the despot of Epirus. He

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

opened a mint at Lepanto, which struck deniers tournois on the Achaian model, with his name and titles *Philippus princeps Achaie, Taranti, despotus Romanie,* and the mint-signature **NEPANTI CIVIS.**[24] Sovereign rights over these territories had been transmitted to him by his father in August 1294. In striking coins, and in using the title of lord of Romania, Philip was following the precedent of king Manfred of Sicily who had gained territories in Epirus by a similar marriage settlement.

There are two substantive issues of the coins of the Lepanto mint, one reading **PhS.P.TAR.DESP** (Schl. XIII, 20), and the other **PhS.P.ACh.TAR.D.R.** (Schl. XIII, 26). The Pylia hoard contained 181 of the former, but only 21 of the latter. These proportions are matched in other hoards. Schl. XIII, 26 is perhaps the later issue, as it becomes relatively a little more plentiful in hoards of later date. Philip may not have used his Achaian title until 1307.

One specimen was noted on which the legend was **PhS.P.TAR. DESPO'**. The plentiful varieties are those with one lis or with two lis on the obverse, and with a cross and a leaf on the obverse; two lis flanked by dots is less common. A specimen with a retrograde reverse, and another that is heavily blundered (PLATE XXXIX, 19, 20) are, perhaps, contemporary counterfeits.

Great Wallachia: *John II, 1303–18.* John II Angelus Comnenus was placed under the tutelage of Guy II of Athens, when he became sebastocrator of Great Wallachia or Thessaly, as a minor. He struck deniers tournois at his capital of Neopatras. Three types are known, but those with the reverse legend **NEOPATRIE** (Schl. XIII, 17) and those with the obverse legend **DVX ANGЄLVS** (Schl. XIII, 19) are rare.[25] Of the 10 specimens of Schl. XIII, 18 in the Pylia hoard, 8 were available for study. The first of those listed below has stops formed from groups of 3 annulets, and the "experimental" reading

[24] The prefixed *n* derives probably from the usage εἰς τὸν Ἔπακτον. The Frankish name for the place was Le Pakto (cf. the classical Naupaktos) or Lepanto.
[25] Metcalf, *ABSA* 1960, p. 59. Note that two examples of Schl. XIII, 19 and one of XIII, 18 are illustrated in P. Lambros, "Monnaies et bulles inédites de Néopatras et de Carytæna," *RN* 1869–70, pp. 184–93, pl. 9. The example in Lambros of Schl. XIII, 18 has a trefoil stop similar to those on nos. 1–2 in the Pylia hoard.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

PATRAꝏ. The sequence apparently progresses from the letter forms **A**, **E**, **И**, through **H**, to **Λ**, **∈**, **N**. There are many near-duplicate dies, as indicated, but only one link, between nos. 7 and 8, which imitate the Clarentza reverse. The weight are as observed after cleaning excpt where indicated.

1. ⁝✠⁝AИGELVS⁝SAB⁝C / ✠ºDELLAPATRAꝏ 0.85 gr. (Plate XLI, 1).
2. ◦✠◦ AИGELVS◦SAB / ✠ D∈LLAPATRA^{P} 0.80 gr. (Plate XLI, 2).
3. ✠ ΛHGELVS:SAB:C / ✠ DELLΛPΛTRA^{P} 0.80 gr., not cleaned. Rev. extremely similar to no. 2. (Plate XLI, 3).
4. ✠ ΛHG∈LVS:SAB C· / ✠ D∈LLΛPΛTRΛ· 0.84 gr. Glendining, Sept. 23, 1970, 338 (incorrectly numbered 334 on the plate). (Plate XLI, 4).
5. ✠ ΛHG∈LVSSΛBC / ✠ D∈LLΛPΛTRΛ· 1.00 gr., not cleaned. Obv. extremely similar to no. 4. (Plate XLI, 5).
6. ✠ ΛNG∈LVSSΛB C / ✠ D∈LLΛPΛTRΛ^{L} 0.76 gr. (Plate XLI, 6).
7. ✠ ΛNG∈LVSΛBCN: / ✠ D∈CLΛPC.ICIΛ 0.86 gr. (Plate XLI, 7).
8. Same die / ✠ D∈CLΛPCIIC.. 0.91 gr., not cleaned. Rev. extremely similar to no. 7. (Plate XLI, 8).

The range of varities in the Pylia hoard is incomplete in comparison with the list given by Schlumberger, particularly as regards coins with double annulet stops. The variety with double trefoil stops is



Fig. 6. Denier tournois of Great Wallachia.

apparently unrecorded, but a similar stop composed of three annulets is found on a specimen published by Lambros in 1870, and reproduced here as Fig. 6. It gives further support to the chronological

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

arrangement of the type proposed above, as the reverse legend is blundered in a way that seems "experimental." The obverse has the letter-forms Λ, E, and И, but the reverse (like no. 2 above) has a non-matching round Є.

Karytaina: Helen Angela, 1291–99? The lordship of Karytaina, in Arcadia, originally comprised 24 knight's fees. The second baron, Geoffrey of Bruyères (1255–75), married Isabel, the sister of William de la Roche. On Geoffrey's death Isabel inherited half the barony, while the other half reverted to the domain. Isabel remarried, and on her death in 1279 the half-fief passed to her husband Hugh of Brienne. In 1291 he in turn remarried, taking as his new wife his sister-in-law Helen Angela (widow of William de la Roche, and dowager duchess of Athens). He assigned the half-fief of Karytaina to her, and she styled herself *dame de Karytaena* from that date. It is not clear, however, that the half-fief was legally Hugh's to give in 1291. In July 1289 Charles II had thought it proper to give Karytaina to his "dear daughter" Isabel;[26] and as a half belonged to Hugh, Charles gave him in compensation the castellany of Beauvoir, which the count exchanged soon afterward with constable Jean Chauderon for the estate of Conversano in Italy.[27]

The coins in Helena's name must have been struck after 1291. They should no doubt be seen in the context of her asperity toward the young Villehardouin heiress who had neglected the land of Greece to live at the court of her father-in-law, and against Florent, the "parvenu" prince of Achaia. Helen had done homage to the king of Naples, but both she and Hugh refused to recognize themselves as vassals of Florent, on the ground that there was no feudal nexus between Athens and Achaia. The coins claim that she held her half-fief not from Naples but *Dei gratia*—a formula that is very unusual in the Frankish series, occurring otherwise only on the Corfiote tournois of Philip of Taranto.

The seven coins available for study appear all to be from different obverse and reverse dies, although it is exceptionally difficult to

[26] Charles did this immediately after his return to Italy, having been a prisoner of the Catalans since June 1284.
[27] From unpublished researches by C. Perrat drawing on the *Registri Angioini*, presented in J. Longnon, *L'Empire latin de Constantinople*, p. 263.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

distinguish them with certainty. The style of no. 1 is neater than that of the rest. There is some slight variation in the abbreviations, as though the die cutter were uncertain of the correct manner. Schlumberger noted the following variations:

·✠ hELENA·D'I·GRA / ·✠ CLARICTIA·S'F (Lambros, IX, 8)
◦✠·hELENA◦DI GR°A / ✠·CLARICTIA·S'F· (Schl., XII, 28)
◦✠ hELENA·DI GR̄Ā / °✠ CLARICITIA·S'F(*sic*) (Sierck Hoard)
✠ hELENA◦DI GR¯A/ ✠◦CLARICTIA·S'F (Sierck Hoard)

On all the Pylia coins there is, so far as can be seen, a thin line of abbreviation sloping upward through the **D**; this can be seen on the Lambros specimen,[28] of which the drawing is reproduced as Fig. 7.

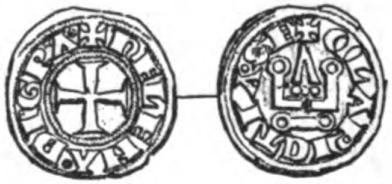


FIG. 7. Denier tournois of Karytaina.

Schlumberger transcribed the legend as **D'I**, in the first of the versions listed above. The word *gratia* appears on all but one of the Pylia coins as **GR A**. The exception has **GPA**, where the die cutter may simply have misjudged the spacing and left himself with insufficient room for the tail of the **R**. The Lambros specimen, too, has the mark of abbreviation between the **R** and **A**, although it is not correctly transcribed by Schlumberger. On the reverse, the legend ends with the letters **SF**, standing for *semifeudi*. The first of the Pylia coins clearly reads **S.¯F_**. The final mark of abbreviation was subsequently attached to the **F**, making it very like an **E**. An alternative version occurs on no. 2, where the bar is placed beneath the letter **F**. Another variant places a hooked line diagonally through the letter **S**: this can be seen clearly on no. 4, and it occurs also certainly on no. 5 and probably on nos. 2 and 7. The letter **A** is sometimes definitely barred (nos. 1, 3, and 4) and sometimes indistinct. The weights are as observed after cleaning except where indicated:

[28] Lambros *RN* 1869–70, pl. 9.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

1. ·✠· hELENA·DI·GR⁻A ·✠·CLARICTIA·S.⁻F_ 0.85 gr. (PLATE XLI, 9).
2. ◦✠◦ hELENΛ°DI GR⁻Λ ✠ CLARICTI S F 0.70 gr. (PLATE XLI, 10).
3. ·✠· hELENA°DI GR⁻A ·✠° CLARICTIA S⁻F 0.95 gr. (PLATE XLI, 11).
4. ✠ hELENA°DI GR⁻A ✠° CLARICTIA S E 0.85 gr.
5. °✠° hELENΛ°DI GPA ✠· CLΛRICTIΛ·S E 0.88 gr., not cleaned. (PLATE XLI, 12).
6. ✠· hELENΛ DI GR⁻Λ ✠° CLΛRICTIΛ◦S F 0.82 gr., not cleaned. (PLATE XLI, 13).
7. °✠° hELENΛ°DI·GR⁻Λ ✠· CLΛRICTIΛ S E 0.74 gr. Glendining, Sept. 23, 1970, 337 (incorrectly numbered 338 on the plate). (PLATE XLI, 14).

METROLOGY

The metrology of the Frankish deniers tournois has never been studied in detail, nor is the task as simple as it might appear at first glance. The observed average weight of the coins in the Pylia hoard was about .875 gr., but the early Achaian issues weighed about .900 gr., while the coins of the Lepanto mint average about .840 gr. Any attempt to compare or contrast the issues of various reigns or mints will thus involve differences of weight of the order of .020 or .030 gr. A parcel of coins from another hoard of unknown provenance, which was kindly lent to the writer for purposes of study by Mr. Bruce Braun, showed very different averages:

	Braun	Qty.	Pylia	Qty.	Difference
Isabel	.781	(24)	.865	(156)	.084 = 9.7%
Philip of Savoy	.773	(21)	.874	(66)	.101 = 11.5%
Philip of Taranto	.786	(29)	.868	(34)	.082 = 9.5%

The coins from the Braun hoard, deposited twenty-five or more years later, have suffered a loss of weight by wear (and possibly also by cleaning) amounting to about 10% of the weight of the Pylia coins, which in turn have presumably lost some of their weight by wear. The differences are far in excess of those between the varieties

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

within the Pylia hoard. It will be immediately apparent that to combine the evidence of coins from different sources would lead to utter confusion. The dispersion of weights on either side of the mean, for example, would be grossly exaggerated.

Cleaning, also, makes a significant difference to the weights of the coins. The Pylia coins had a glossy black patina, and were in the main free from incrustation. They had evidently been soaked in olive oil by their original owner, and some were still oily to the touch. The experiment was made of removing all traces of oil or grease by washing a few specimens in toluene. This had the effect of reducing their weight by a figure of consistently around .003 gr. A more drastic cleaning of a group of about 60 specimens was made possible through the valued cooperation of Mr. Carl Subak. The loss of weight, which is analysed more fully in Appendix II, was around .030 to .040 gr.

The decisive merits of the Pylia hoard are that it was very large and that the coins were uniform in condition and mainly free from incrustation. Thus, enough weights could be obtained from each separate type—and sometimes from each of a number of varieties—to give a good average. It was out of the question to clean all the available coins drastically, and the statistics are therefore based on the observed weights reduced throughout by .003 in order to discount the olive oil. As the weights after cleaning do not cluster any more closely around the mean than the weights before cleaning, there is no reason to think that they reflect the original weights of the coins more faithfully.

Rough estimates have been published for the loss of weight by wear in mediaeval coinages. Craig has put forward the figure of 2% per decade for English coins,[29] and, more recently, emperical observations by Dolley and Seaby have suggested that a fourteenth-century penny might lose 0.5 or 0.55 grains per decade, which is equivalent to 2.5 or 2.75% per decade.[30] By extension of the same reasoning, a denier tournois, being of about the same diameter,

[29] J. Craig, *The Mint, A History of the London Mint from A.D. 287 to 1948* (Cambridge, 1953), p. xvi.
[30] R. H. M. Dolley and W. Seaby, "A Parcel of Edwardian Sterlings in the Ulster Museum," *SCMB* No. 597 (1968), pp. 161–166.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

might be expected to lose about the same amount of metal, but as it was a lighter coin (say 0.87 gr. instead of 1.30 gr.) the percentage loss per decade might be 3.5 or 4.5%. As a first and rough approximation this fits adequately with the evidence from the two hoards mentioned above, where a loss of 10% in about 25 years implies a rate of 4% per decade. It is borne out also by the Provençal tournois of Charles I in the Pylia hoard. We know that they were struck at 240 to the marc of Montpellier, which, with appropriate adjustments, works out at an average weight of .994 gr.[31] The 14 coins in the hoard (and this is all that there were) average .808 gr.; if their age is assumed to be 50 years, the rate of loss is fractionally over 4% per decade.

If the Frankish deniers tournois had been manufactured to the same average weight in successive reigns and at each of the three mints, a graph of the coins from two particular hoards, P and Q, might look roughly as in Fig. 8a. The results from the Pylia hoard, shown on the same scale in Fig. 8b, offer a very different picture.

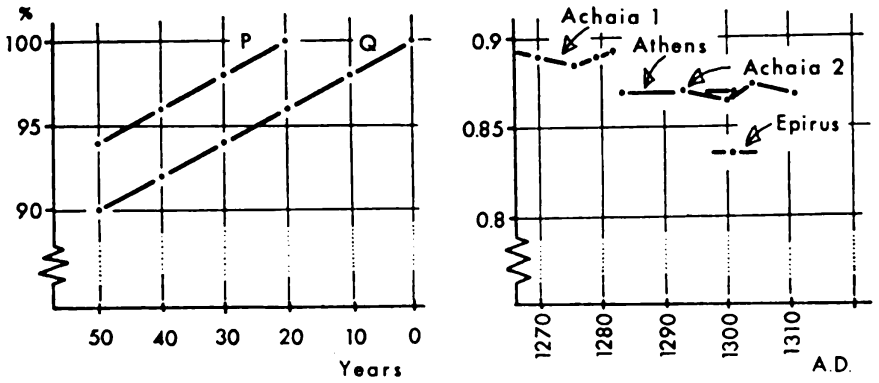


FIG. 8. "Weight/date" graphs for (a) two idealized hoards P and Q containing the same kind of coins, but one deposited later than the other, (b) the Pylia hoard (statistics derived from Table 2 below).

Even without allowing for any loss of weight by wear, the Achaian issues of William, Charles I and Charles II are distinctly heavier than those of Florent and later rulers, and we may postulate a weight reduction at or near the beginning of Florent's reign. The reason is not far to seek: already in the time of Charles II, William de la

[31] See L. Blancard, *Essai sur les monnaies de Charles Ier comte de Provence* (Paris, 1868), pp. 60–63.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Roche had introduced a lower weight standard at the mint of Thebes, which then struck deniers tournois for the first time, and Florent evidently decided to follow suit. The even lower weight standard employed for a time at the Lepanto mint (which is analysed in more detail below) did not have the same effect. From 1307 Philip of Taranto controlled Clarentza as well, and the output at Lepanto probably fell sharply.

The Athenian coins, as well as being lighter in weight, were of a lower alloy. A reduction in the standard of fineness of the Achaian issues to match those of Athens did not, however, take place until the recoinage under Isabel.[32] Thus, the Achaian response to the challenge of the Thebes mint was in two stages.

The best estimates that can be made from the Pylia hoard of the original average weights of the coins of each reign will be obtained by adding a proportion to the calculated figures at the rate of, say, 4% per decade. The results are subject to a slight measure of uncertainty in that the sample consisted of a selection of the "better" (though not necessarily the heavier) coins from the hoard. The validity of the sample is fully discussed in Appendix I. A rate of loss of some figure other than 4% per decade might be more realistic, but there is no point in speculating on possible alternatives. All the necessary information has been put on record, and when the evidence from another large hoard becomes available, the assumptions can be reassessed, and the figures adjusted as necessary.

Adding 4% to 96 is not, of course, strictly equal to subtracting 4% from 100; and over a number of decades the discrepancies arising from approximate methods of calculation may be serious. Thus, the Provençal tournois which average .808 gr. will, after allowing for 50 years' wear at 4% per decade, give a figure of

$$.808 \times \frac{100}{96} \times \frac{100}{96} \times \frac{100}{96} \times \frac{100}{96} \times \frac{100}{96} = .991 \text{ gr.}$$

$$\text{cf. } .808 \times \frac{100}{80} = 1.01 \text{ gr.; or } .808 + 20\% = .970 \text{ gr.}$$

[32] See A. A. Gordus and D. M. Metcalf, *Coinage of the Crusading Period: Neutron Activation Studies* (in preparation). A number of coins of Florent and Isabel from the Pylia hoard, of different varieties, were analyzed in case they should show that a change was made at an intermediate date.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The estimates of the original mean weights for each reign are set out in Table 2, together with the figures from which they are derived, at the compound rate of 4%.

Type	Calculated mean weight	Notional date	Years of wear	% added	Best estimate
G PRINCEPS	.891 (74)	1270	40	16	1.049*
G PRINCE ACh	.886 (54)	1276	34	13.6	1.015
Charles I	.890 (50)	1279	31	12.4	1.010
Charles I & II	.892 (148)	1282	28	11.2	1.000
Florent	.871 (177)	1293	17	6.8	.934*
Isabel	.865 (156)	1300	10	4	.901
Philip of Savoy	.874 (66)	1304	6	2.4	.895
Philip of Taranto	.868 (34)	1311	0	0	.868
William	.868 (186)	1284	26	10.4	.966
GVI DVX	.869 (17)	1301	9	3.6	.901*
Lepanto	.834 (62)	1301	9	3.6	.865*

TABLE 2. Mean average weights of the principal types in the Pylia hoard, and estimates of the original mean weights based on a loss of weight by wear of 4% per decade. The estimates marked with an asterisk are subject to modification by more detailed analysis.

One particular period for which the averages deserve closer examination is that around the time when the reduction in weight was made, namely the reigns of Florent and Isabel in Achaia, and William in the duchy of Athens. The variety of Florent's coinage with stars on the reverse is appreciably heavier than his other main varieties:

a) Star on reverse. Barred **A**.	.888 gr.
b) Acorn(?) on obverse. Unbarred **A**.	.869 gr.
c) **D'CL R NCI. X**.	.865 gr.

Isabel's coinage shows no very significant variation:

a) **B✠T** on obverse. Unbarred **A**.	.864 gr.
b) 3-rayed symbols and stars. Barred **A**.	.863 gr.
c) Trefoil. Unbarred **A**.	.875 gr.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

For William de la Roche, the average for variety b) is somewhat lower:

a)	✠ G°DVX°ATENES	.869 gr.
b)	✠ G·DVX·ΛTЄNIS, etc.	.854 gr.
c)	✠ G↾DVX↾ATENES, etc.	.869 gr.

In the Achaian series, there appears to have been a downward drift in the weight standards reign by reign, with a sharper reduction during the reign of Florent, between varieties a) and b). The figure for variety a) matches those for Charles I and II closely, while varieties b) and c) are of very much the same weight as those for the coins of Isabel. The estimates of the original weights suggest that Florent did not merely bring the standard down to that of the duchy of Athens, but went further and undercut it.

The dispersion of weights around the mean introduces the topic of skewness, which has attracted a certain interest in other series of mediaeval coins, particularly in connection with efforts to establish the original weight standards of Carolingian deniers.[33] Hemmy[34] has developed the theory that, in a coinage which leaves the mint with weights varying approximately according to a normal distribution (Fig. 9, curve A), some individual coins will with the passage of time receive more wear than others. In the extreme case, a few will receive virtually no wear (x), and a few will receive an exceptional amount of wear (y_1, y_2), and the distribution pattern will thus be modified to a skew curve (Fig. 9, curve B). As the area under the curve remains the same, its extension to the left will involve a corresponding lowering and flattening of the peak. In A, the area to left and right of the peak is equal, whereas in B the area to the left is greater (n, n). In other words, in curve A the mean and median coincide with the modal value, whereas in B they are less. If Hemmy's hypothesis of variable loss of weight by individual coins were replaced by the hypothesis of equal loss, the change in the distribution pattern would be not at all in its shape but only in its location—it would

[33] See especially P. Naster, "Trouvaille de monnaies carolingiennes à Zelzate," *RBN* 1950, pp. 208–224, and K. F. Morrison, "Numismatics and Carolingian Trade: a Critique of the Evidence," *Speculum* 38 (1963), pp. 403–432.
[34] A. S. Hemmy, "The Weight Standards of Ancient Indian Coins," *JRAsiaticS* (Calcutta), Pt. 1 (Jan. 1937), pp. 1–26.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

simply be moved to the left (Fig. 9, curve C). The truth doubtless lies in a combination of hypotheses "B" and "C" and the practical problem is to produce statistics against which the theories can be tested. An ideal test will involve coins of the same variety (since mint practice may have changed from one issue to another) from two large

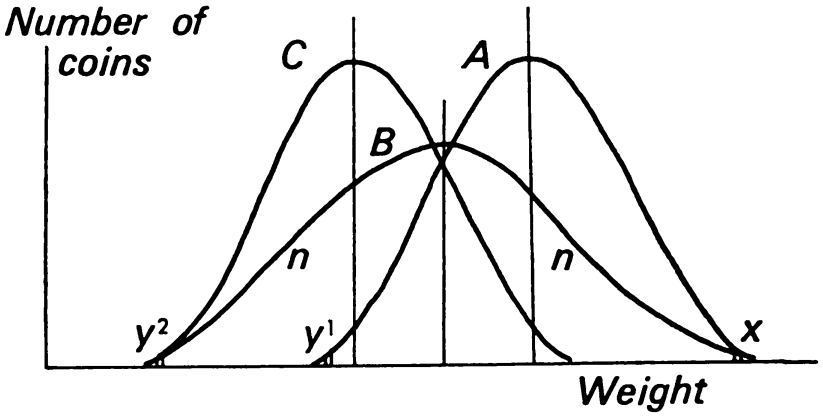


FIG. 9. Graphs to show changes in the distribution pattern of weights, caused by loss of weight through wear: Hemmy's theory of developing skewness, and an alternative to it. (The effects have been somewhat exaggerated for the sake of clarity.)

hoards, deposited at different dates. If we compare the coins of Isabel, Philip of Savoy, and Philip of Taranto from the Braun hoard, amalgamating them in order to obtain a sufficiently large sample, with a matching sample drawn from the Pylia hoard,[35] the two groups show remarkably compact distribution patterns, as in Fig. 10. The histograms are very much the same shape, with perhaps a little flattening in the Braun group (39% of the weights fall in the central step, cf. 44% in the Pylia group.) The main difference is in location: the Braun coins are much lighter. There is no evidence of the persistence of a few coins at virtually their original weight.

An attempt was made to estimate the peak or modal point more closely by the rough and ready method of shifting the steps of the

[35] This had to be made up in roughly the same proportions, because the distribution patterns for the three reigns separately show significant differences. A random sample of 63 coins of Isabel was used, together with the 66 coins of Philip of Savoy; the 34 coins of Philip of Taranto were each counted twice.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

histogram (.801–.850; .811–.860; .821–.870; and so on) and plotting the results as a graph, using the middle values (.825; .835; .845; and so on). A comparison of the central areas of the two histograms by this method (see Fig. 11) shows no sign of the flattening of the

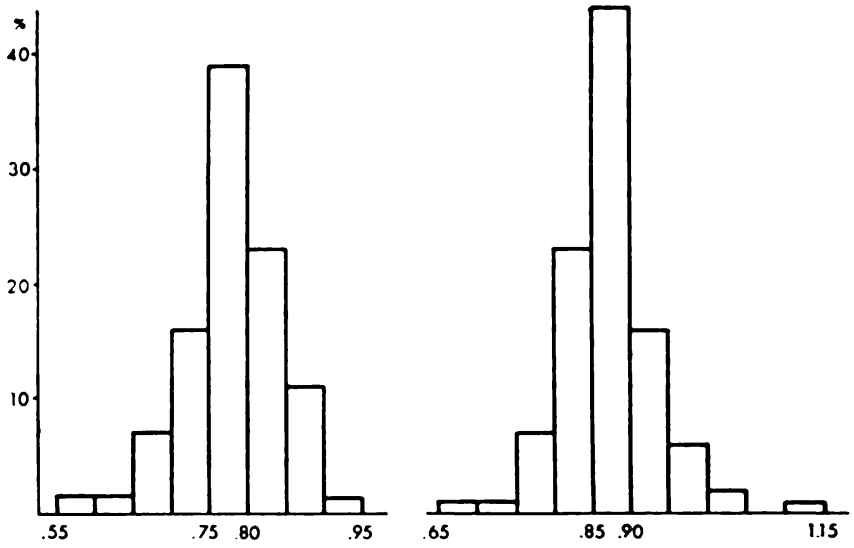


FIG. 10. Histograms for similar types of coins from two hoards deposited at different dates, to show the effect of wear on the distribution pattern. (The numbers of coins in each step are converted to percentages, so that the area enclosed by each histogram is the same.)

peak which Hemmy postulates and which would in principle show up clearly on the graphs if it were present. The graphs define the modal points with a probably specious accuracy; for what it is worth, the proportion of weights above and below the mode is:

Braun (.785 gr.)		*Pylia* (.865 gr.)	
Below: 53%	Above: 47%	Below: 43%	Above: 57%

This seems to be as accurate an indication of the difference in skewness between the hoards as can be extracted from the available statistics. It cannot be seen from an inspection of the histograms (Fig. 10) because the positioning of the steps is arbitrary in relation to the mode. It should be stressed that the modal value cannot be determined with much certainty, being subject to margins of sampling error, and that quite a small adjustment in its value may alter the numbers of coins above and below that value appreciably.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

A comparison of the same varieties of coinage from two hoards concealed at different dates thus suggests that the distribution pattern behaves in a way intermediate between hypotheses "B" and "C", but that "C" offers a much closer approximation. For the study of the Pylia hoard the conclusions are that clear differences in the *shape* of the histograms or distribution curves, as between different varieties of coinage, should be interpreted as arising directly from differences in mint practice, and that only a very small allowance need be made for the effects of flattening and skewness developing with age. It will, however, be interesting to check this in the future against another large hoard.

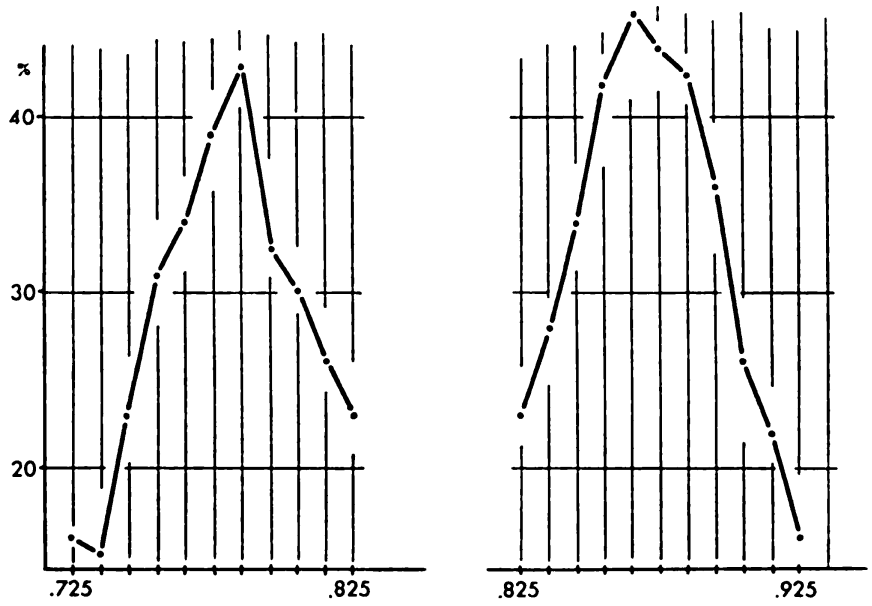


FIG. 11. The modal areas of the histograms in Fig. 10, as defined by shifting the steps; there is no sign of flattening in the left-hand graph, although the coins are some 10% lighter.

A good example is provided by the coinage of Isabel's reform of 1299, of which the weights were adjusted extremely carefully. No less than 57% of the weights fall in the central step; and the steps centered on the values .861 to .865 include 63–65% of the coins. The proportion of coins above and below the mode is:

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

At .861		At .865	
Below: 41%	Above: 59%	Below: 49%	Above: 51%

Clearly, the workmen were under orders to produce the reformed coinage with great care. The coins of Florent, which the same mint had produced only a few years before, show no more than 34% of the weights in the central step. In this way, once again, statistical evidence reveals the existence of a recoinage under Isabel.

The sharp contrast in the histograms representing the work of one and the same mint within a single decade imposes caution in interpreting the differences between varieties. The three main varieties of Florent, which, as we have seen, are separate in terms of their style and differ in their mean average weight, also yield rather different histograms (see Fig. 12). That for the heavy variety a) is apparently skew, as though the heavy coins had been removed by selection. The sample is, however, relatively small (39 coins), and the degree of skewness can be reduced by altering the steps. It will be advisable to compare the results from another sample of the same variety, and perhaps also to check among the excavation coins at Corinth, to establish the proportions of the main varieties there.

If separate histograms are drawn for the main varieties of Isabel's reign, a) and b), they appear very different from each other (see

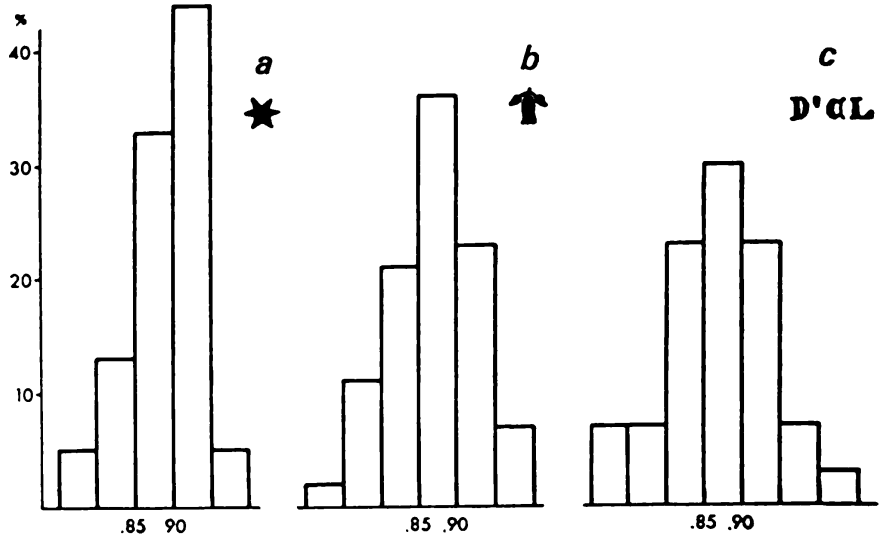


FIG. 12. Histograms for varieties a), b), and c) of the coinage of Florent.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Fig. 13, a and b(i)). The difference is more apparent than real. When the central step is adjusted, for variety b), from .851–.900 to .841–.890, no less than 69% of the values fall into it (Fig. 13, b(ii)). Variety a) on the same basis reaches 70%. Thus, the histogram for all Isabel's coins, which showed 57%, or an adjusted maximum of 63–65%, in the central step, can be seen to have been slightly flattened by the inclusion of varieties c–f, which have around 50% of the values in the central step.

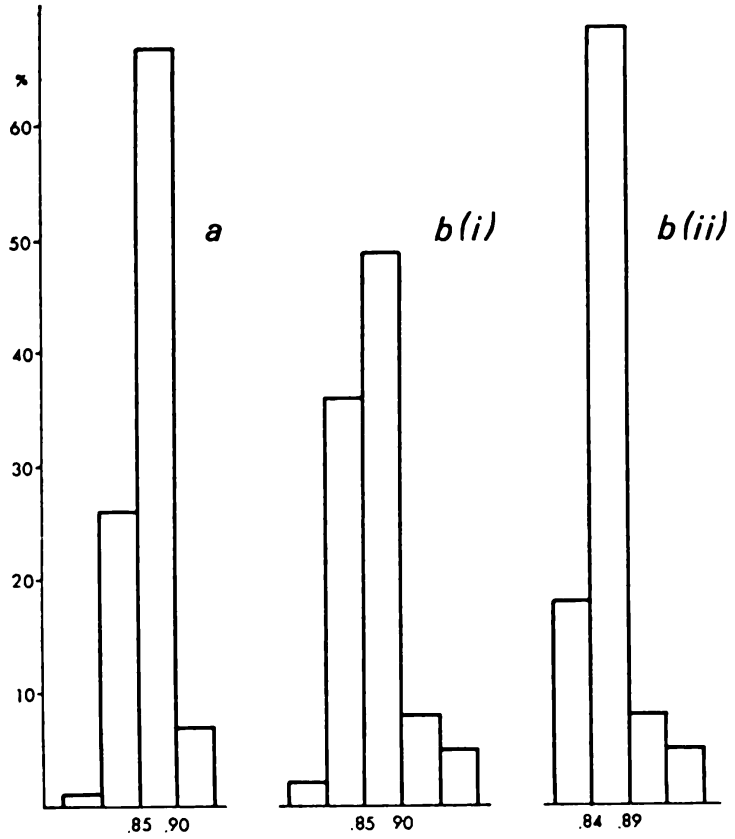


Fig. 13. Histograms for varieties a) and b) of the coinage of Isabel.

A proportion of 30 to 35% of the weights in the central step seems to be typical. Thus, the coins of Charles I and II with the legend **DЄ CLΛRЄNTIΛ** (which were nearly 30 years old at the date of concealment of the hoard) yield a very regular histogram with 32% of the values in the central step, as shown in Fig. 14a. The sample

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

is large, consisting of 148 specimens. The histogram for William (**G.PRINCE ACh**) is extremely similar. (That for Charles I, **CLARENTIA**, based on 50 specimens, appears to be rather irregular.) Yet the earliest Achaian tournois, of the **G.PRINCEPS** type, show a much flattened histogram, with only 24% of the values in the central step (Fig. 14b). One would have expected the beginnings of an autonomous coinage to be rather carefully controlled, for the sake of its reputation: *prima facie* the flattened histogram calls for explanation. A possibility which comes to mind is that, if an issue was continued over a long period, with the volume of coinage in the latter part of the period comparable to that in the former, a histogram for the type would automatically be flattened. To take a simplified case, let us imagine that two equally large issues of the same design were produced with an interval of 12 to 15 years in between. If a histogram such as that for Charles I and II (Fig. 14a) were moved downward by exactly one step (as might happen by a loss of weight by wear in 12 to 15 years) and superimposed on the same histogram in its original position, the result would be quite similar to Fig. 14b.

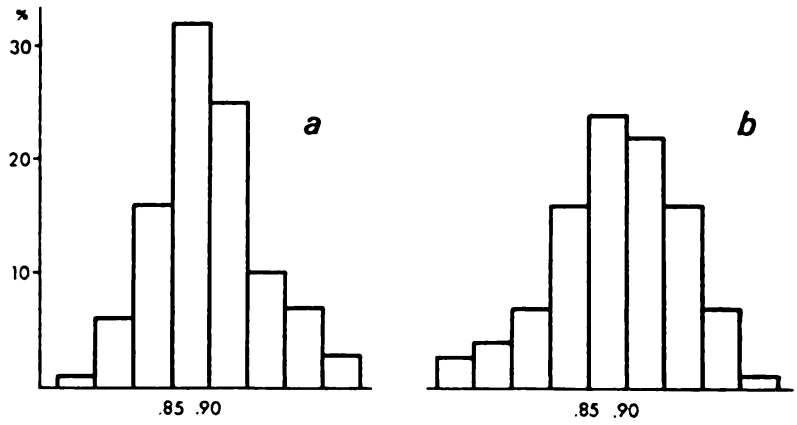


FIG. 14. Histograms for a) the coinage of Charles I/II (**DЄ CLXRЄNTIX** and b) the early coinage of William (**G. PRINCEPS**).

This prompts one to go back to the **G.PRINCEPS** coins to see whether there are any significant differences in weight between the varieties. The average for the type as a whole is .891 (Table 2). One could wish that one had more than 74 specimens as the available

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

total. The evidence is, nevertheless, clear-cut. Variety a), with double dots on the reverse, averages .875 (17 specimens), with the mode at the same point, and is very carefully adjusted, more than 50% of the coins being in the central step. Variety b), with crescents, averages .882 (16 specimens). Varieties c) and d), with rosettes, average .916 (22 specimens), with a modal value of at least .930.[36] Since the breakdown into varieties reveals a difference of more than 0.3 gr., or at the extreme 0.4 gr., and since it also improves the modality of one of the groups so much, there can be little doubt that it reflects a real change in mint practice. On metrological grounds alone, it is tempting to redraw the graph shown as Fig. 8b, placing the early Achaian coins in the following order:

G.PRINCEPS, varieties c and d	.916
G.PRINCEPS, variety a (recoinage)	.875
G.PRINCEPS, variety b	.882
G.PRINCE ACh	.886
Charles I	.890
Charles I/II	.892

On this interpretation, one can identify an earlier recoinage, associated with a reduction in the weight standard, and revealing similar metrological patterns to the reform of 1299. The stylistic evidence, however, for the order of varieties a, b, c and d would probably have led one (incorrectly?) to a different conclusion. If the weights tell the true story, coins with a "late" version of the châtel, barred **A**'s, reversed **N**'s, and recumbent **S** are presumably from early dies, and are the first Frankish tournois.

Some mention should be made of the very rare variety reading **GV.PRINCESP** (or **PRIHCEPS**) / **D'CLΛRENCIΛ**.[37] One's first thought is to refer it to the group of counterfeit hybrids, such as **TVRONVS CIVI/D.CLARENTIA,** or the later ✠ **G°PRINCEPS/**

[36] This information can be supplemented by a further 5 coins still in private hands, and not forming part of the "available sample" which is the basis of the statistics throughout the article. The 5 selected specimens weigh: a) .85, .95; b) .93; c) .84, .94. Incorporating them into the totals does not affect the force of the argument.

[37] See N. D. Marchant, *Lettres du Baron Marchant sur le numismatique et l'histoire* (Paris, 1851), pp. 77–78 and pl. VII, 4.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

⁘THEBE CIVIS and **✠GVI.DVX.ATЄNЄS / DЄ CLARЄNCIA**. But the spelling **D'CLARENCIA**, which is testified by a coin originally published by Marchant,[38] is not used regularly until the reign of Florent, and there was no obvious reason at that time for imitating the coins of William. **GV.PRINCESP** should therefore be accepted provisionally as an early, "experimental" variety. The



FIG. 15. Variety of the first issue of denier tournois of William II of Achaia, reading **GV.PRINCESP** (After Marchant, 2nd. ed.)

style certainly appears primitive (see Fig. 15), but there are no stops to match those on the substantive varieties, and the coin therefore offers no clue to the correct order of the latter. Two specimens have turned up at Corinth, one with the same blundered spelling.[39]

The date when the Achaian issues began is a topic about which there is little firm evidence. Various dates have been canvassed. The year 1249, which is mentioned by Marin Sanudo,[40] also saw the creation of the tournois coinages of the king's brothers Alphonse of Poitiers and Charles of Anjou as count of Provence. From 1265, Louis suppressed the circulation of the provincial tournois in France, and this may have led to their export to Greece; in 1267 by the Treaty of Viterbo William of Villehardouin accepted Angevin overlordship of Achaia, with possible repercussions on the coinage. The case for a late date was argued by the writer[41] on the grounds that the Xirokhori hoard was of a compact age structure, but in light of the stylistic and metrological analysis of the **G.PRINCEPS** type

[38] Marchant's illustration is reproduced in *RN* 1841, pl. XVI, 3. Note that the coin illustrated in the second edition of Marchant, and reproduced here as Fig. 15, is a different one, from the Espine collection.
[39] From the section Agora NE 1936.
[40] *Istoria del regno di Romania*, see Schlumberger, p. 309.
[41] D. M. Metcalf, *Coinage in the Balkans, 820–1355* (Thessaloniki, 1965), p. 228.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

this view now appears unacceptable. The Corinth hoard of 1934, concealed not earlier than ca. 1255, and containing many French tournois, with some also of Alphonse and Charles, but no local issues, would rule out 1249 as the starting date for the Achaian coinage, if one could be sure that it is not a traveller's hoard.[42] The most recent addition to the evidence—and again it is negative—comes from the discovery of a group of tournois on the Areopagus at Athens concealed, arguably, in the period 1255–9. They show that Charles' coins were, occasionally at least, already being carried to Greece well before the Treaty of Viterbo, and they suggest that the issue of Frankish coins (which were absent) cannot yet have begun.[43] There are other reasons, particularly the topographical distribution of the excavation coins within the Corinth site (see Appendix VI), for thinking that French tournois, particularly the abbatial issues of St. Martin of Tours after 1205 and those in the names of Philip II and Louis IX, were originally plentiful in the currency of central Greece, and that the autonomous issues were intended to replace them. The Provençal and Poitevin tournois were almost all later arrivals in Greece, as may be seen, again, from the evidence from Corinth—and this should be taken into account in a consideration of the original weight standard of the Achaian tournois. The evidence from the Pylia hoard seems to point to a date early in the 1260's which would allow say 3 to 5 years for the **G.PRINCE ACh** issue (from 1273/5) and 5 to 7 years each for the heavier and lighter **G. PRINCEPS** issues. With a weight loss of 4% per decade over 45 years, varieties c and d of **G. PRINCEPS** would then have had an original weight of 1.101 gr. This is sufficiently close to the theoretical weight of the French tournois of Louis IX (1.12 gr.[44]) to suggest that the figure of 4% is about right for the available sample, and that the earliest Frankish tournois were on the French standard or very close to it. (Is this the reality that the text of Marin Sanudo

[42] Metcalf, *ABSA* 1960, p. 48.

[43] This was not really established by the Corinth hoard (assuming it to be of local derivation) because the later terminus for its date of deposit is vague. For the Athens finds, see D. M. Metcalf, "Frankish Petty Currency from the Areopagus at Athens," *Hesperia* 34 (1965), pp. 203–223.

[44] See J. Lafaurie, *Les Monnaies des rois de France*, Vol. I, *Hugues Capet à Louis XII* (Paris, 1951), p. 24, no. 201.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

echoes?) The time scale proposed above would also allow for the change-over to the lighter, Provençal standard to occur following the Treaty of Viterbo. Variety a, averaging .875, and having suffered a weight loss of 4% per decade for 40 years, would originally have been 1.03 gr. This is close to the theoretical value of .996 gr. It must be emphasized that the sequence of varieties a–d of **G.PRINCEPS** is at present conjectural, and will have to be established by the normal numismatic methods. The dotted **N** in **PRINCEPS** in variety a may be copied from the Provençal tournois, on which it is general.

Athens. The histogram for the most plentiful variety of Athenian coins of William de la Roche, **✠ G°DVX** (of which 133 specimens were available) is quite regular in form, with 29% of the values in the central step (see Fig. 16a). Limited numbers of coins of the other varieties do not reveal any significant differences in their distribution patterns. They, and the coins of Guy II, which are perhaps on a double weight standard, will be better studied from some other hoard.

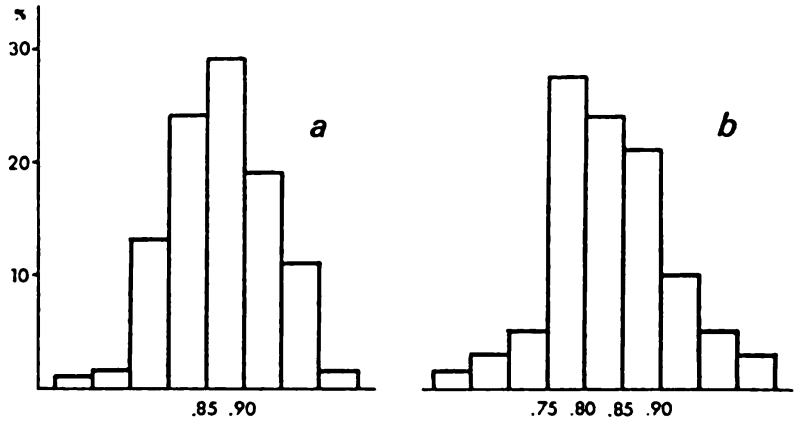


FIG. 16. Histograms for a) the Athenian coinage of William, variety a, and b) the Epirote coinage of Philip of Taranto, Schl. XIII, 20.

Romania. The Epirote coins (Schl. XIII, 20) show a modal point at .79–.81, and the histogram should perhaps be interpreted as including a carefully adjusted issue at this weight, together with a secondary peak at roughly .87 gr. (the reduced Achaian standard).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

There are however no obvious metrological differences between the varieties. The coin reading **PhS.P.TAR.DESPO** weighed .79 gr. The Acarnania hoard (Appendix III) offers some support for the theory of a double weight standard, but again the evidence of another and larger hoard would be welcome.

Other issues. The weight standards of the scarce issues in the Pylia hoard may be estimated approximately as follows: John Angelus, mean, .865, with a normal distribution; Helen Angela, .835; Guy II, **DVX ACTENAR'**, .875, closely adjusted; Guiot, .875 gr.

THE FOREIGN TOURNOIS IN THE HOARD

There were in all just 20 "foreign" tournois in the Pylia hoard, of which 14 were provençaux of Charles I, 3 were royal issues, 2 were coins of Alphonse of Poitiers, and one was an imitative piece combining elements from the designs of Charles I and Louis IX.

This tiny fraction—0.6% of the hoard—perhaps includes a few coins that had survived from the currency as it was before Frankish tournois were struck; but many of the Provençal issues, and all the royal issues (if that in the name of Louis is securely dated[45]) are likely to have reached Greece after the date of the Treaty of Viterbo.[46]

France: royal coins

Louis IX, 1266–70

1. ✠ **LVDOVICVSREX / ✠ TVRONVSCIVIS.**
.909 gr. Lafaurie 201. (PLATE XLII, 1).

Philip III, 1270–85

2. ✠ **PhILIPPVSREX / ✠ TVRONVSCIVIS.**
.949 gr. L. 207. (PLATE XLII, 2).

[45] On the division of deniers tournois between Louis VIII and Louis IX, see the evidence from Athens in Metcalf, *Hesperia* 34 (1965) at pp. 219–220, note 40, and coins 204–212.

[46] For an analysis of the proportions of foreign tournois of various sorts in the Corinth site finds and in the hoards, see Metcalf, *ABSA* 1960, Table 7.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

3. ✠ PhILIPVS'REX / ✠ TVRONVS'CIVIS.
.929 gr. L. 207. (PLATE XLII, 3).

Poitou: *Alphonse of Poitiers, 1241–71*

4. ✠ ΛLFVHSVSCOHÊS / ✠ PICTΛVIEHTSIS.
.869 gr. P.A. 2583. (PLATE XLII, 4).

Comtat-Venaissin

Provence, marquisat: *Alphonse of Poitiers, 1249–71*

5. ✠ Ā.COMÊSTOLOSЄ / ✠ MARCh' PVIHCIЄ
.832 gr. (PLATE XLII, 5).

Provence, county: *Charles I, 1246–85*

Rolland's classification of the provençaux of Charles I takes the letters **E** and **N** as the guiding criteria.[47] He associates a square **E** and plain **N** with the issue of 1249, and a lunate **Є** and dotted **Ṅ** with that of 1262. No. 12 below apparently has an undotted, reverse-barred **И**, and the **H** of nos. 6 and 11 may be undotted. The rest are dotted. A square **E** with a definitely dotted **N** occurs on nos. 7, 8, 9, and 10 (and probably on 6 and 11).

A. *With the legend* **K.COMES**, *etc.* / **PROVINCIALIS.**

6. ✠ K:COIÎÊS·PFI·RFF / ✠ PROVIHCIĀLIᔕ. **N** uncertain.
Hook-shaped contraction mark before **P** on obv. Elaborate fleur-de-lis; no dots in châtel (?). .827 gr. Rolland 19. (PLATE XLII, 6).

7. ✠ K.COHÊS·P.FI.RE.F. / ✠ PROVIHCIĀLIS.
Dots in châtel form triangle. .859 gr. (PLATE XLII, 7).

8. ✠ K:COMÊS·PFIRE·F· / ✠ PROVIHCIΛLIS.
Plain **P** on obv. .859 gr. (PLATE XLII, 8).

9. ✠ K:COIÎÊSP·FI.RE.F. / ✠ PROVIHCIΛLIS.
No dots in châtel. .883 gr. (PLATE XLII, 9).

[47] H. Rolland, *Monnaies des comtes de Provence, XIIe–XVe siècles* (Paris, 1956), pp. 115–126 and 202–211.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

B. *With the legend* **K.CO.P.FI.RE.F / PVINCIALIS.** The letter **P** on the reverse is preceded by a contraction mark consisting of a small triangle, on all the following coins with the possible exception of no. 15 (cf. the hook-shaped mark of nos. 6 and 7). The same triangle mark can be seen in front of the **P** on the obverse, except on nos. 11 and 12.

10. ✠ **K:CO·P.FI·RE·F / ✠ PVIHCIΛLIS.**
.654 gr. Rolland 20. (PLATE XLII, 10).

11. ✠ **KCO·P·FIRE·F / ✠ PVIHCIALIS.** The letters **H** and **A** on the reverse are obscure. .765 gr. (PLATE XLII, 11).

12. ✠ **K·CO·P·FI·RЄ·F· / ✠ PVIHCIΛLIS.**
.875 gr. (PLATE XLII, 12).

13. ✠ **K·CO P ·FIRЄ·F / ✠ PVIHCIΛLIS.**
.849 gr. (PLATE XLII, 13).

14. ✠ **K·CO·PFI·RЄ·F / ✠ PVHCIΛLIS.** The serifs on the bar at the top of the **A** consist of dots. .784 gr. (PLATE XLII, 14).

15. ✠ **K·COP·FI·RЄ·F / ✠ PVIHCIΛLIS.** The letter **A** as on no. 14. .713 gr. (PLATE XLII, 15).

16. ✠ **K.COP.FI·RЄF / ✠ PVIHCIΛLIS.**
.817 gr. (PLATE XLII, 16).

17. ✠ **K·CO.P·FI·RЄF· / ✠ PVIHCIALIS.** The letter **A** is obscure. Three dots close together in a straight line in the châtel. .811 gr. (PLATE XLII, 17).

18. ✠ **K·CO·P.FI·RЄ·F· / ✠ PVIHCIΛLIS.** The serifs on the upper bar of the **A** consist of dots. The three spikes of the fleur-de-lis rise separately from the horizontal bar. There are three widely-spaced dots in the châtel, forming a bold triangle.
.745 gr. (PLATE XLII, 18).

19. ✠ **K·COP·FI·RЄ·F / ✠ PVIHCIΛLIS.** Note the unusual linear version of the fleur-de-lis. In the châtel, three dots in a straight line.
.865 gr. (PLATE XLII, 19).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Contemporary copy

20. ✠KCOHLIVS[.]E[.] / ✠TROIOSI.CIVI. Note the delicate treatment of the initial cross on the reverse: there is a curved row of dots above and below it, and a small, linear, "incised" cross in the center of it. .941 gr. (PLATE XLII, 20).

APPENDICES

I. THE VALIDITY OF THE SAMPLE

The types of the coins in all but a small section of the hoard were, as has been explained, fully listed before it was dispersed, and an accurate summary of its contents has been presented in Table 1. The study of die varieties and of metrology, however, was made from a sample consisting of various parcels. Two of these, namely one (A) containing 302 coins, and another (B) containing a mixture of 253 coins from the Pylia hoard and 45 from the Acarnania hoard, were a representative choice made by the purchaser on the criterion of preservation, that is, essentially, coins which were well struck and easy to read, and free from incrustation. A third similarly chosen parcel (C) comprised 410 coins, of which 5 were extraneous, including 4 from the Acarnania hoard; the 405 included the 20 "foreign" coins and were retained for a time by the purchaser as his prime selection of the common types from the hoard, but they were later sold. A smaller parcel (D) thought to be from the same source had passed through several hands before it was seen, and had probably had some coins selected from it. When seen it contained 98 coins, of which 9 were differently patinated from the Pylia hoard. Finally, 32 scarce coins (E) were photographed by the purchaser, and the weights of most of them noted; and 5 more coins (F) were weighed (see note 36 above). The remainder of the hoard, consisting of some 2,000 coins, is thought to have been sent to America, but its present whereabouts is unknown. Each of the parcels A, B, C, and D contained approximately the same relative proportions of the common types, with a few unusual specimens concentrated in parcel C. The totals of Frankish coins definitely from the Pylia hoard in those four parcels, which made up the "available sample" for purposes of

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

studying the varieties and the weights, are shown below, together with the percentages which they represent of the totals for each type in the hoard. (In calculating average weights, any obviously imitative pieces, etc., were excluded.)

	Available sample	Sample size
Achaia, William II, Schl. XII, 11	73	26%
William II, XII, 12	54	
Charles I, XII, 16	50	39%
Charles I/II, XII, 17	148	36%
Florent, XII, 18	177	41%
Isabel, XII, 19	158	34%
Philip of Savoy, XII, 20	66	28%
Philip of Taranto, XII, 21	34	26%
Athens, William I, XIII, 2	187	34%
Guy II, XIII, 9	17	30%
Romania, Philip of Taranto, XIII, 20	64	35%

As far as the common varieties of each type are concerned, there is absolutely no reason to doubt that the sample is random, except that one or two varieties in rougher style, such as Florent, variety c, may in principle be under-represented. Nor is there any reason to think that coins with unusual marks are under-represented, since no particular interest has hitherto attached to the study of the varieties.

The principal uncertainty is whether the average weight of the sample may be any different from the average weight of the hoard as a whole. The coins are so thin that in theory, one would not expect (within one particular variety) a close correlation between the weights of the flans and the legibility or neat striking of the coins, except that a small proportion of the total might consist of defective or light weight flans which would give a poor striking. Given a roughly normal distribution pattern of weights, and a nil or low positive correlation between weight and attractive appearance, a 30% sample should be large enough to approximate closely the overall distribution, although with a possible tendency to minimize skewness at the lower end of the weight range. Clear differences between varieties observable *within* the sample are highly unlikely to be specious, and,

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

as far as one can see, will be subject to negligible margins of error. It is, of course, these within-sample differences on which the argument has been based.

The overall mean averages for the four parcels, with a deduction of .003 from the observed weights, are: A, .879; B, .877; C, .869; D, .867. It will be noticed that parcel C, representing the first choice, is lighter than A or B. This is partly, but not wholly, because it contained relatively more Epirote coins. Allowing for the fact that many of the coins in parcel D were somewhat incrusted, their comparable average weight if unincrusted might have been close to .85 gr. (see Appendix II). It seems probable, therefore, that the average for the whole hoard would have lain between .86 and .87 gr. There is no reason to think that the calculations of percentage loss of weight by wear per decade have been affected more than marginally by being derived only from a 30% sample, since they too rest on in-sample variation. The only proviso is that the proportion of coins of William II of Achaia, 26%, is below average, and this may be because they were generally more worn, and fewer of them seemed worth selecting. It will be remembered that the mode for varieties c and d was appreciably higher than the mean. If the average weight of **G.PRINCEPS**, varieties c and d were too high as calculated, it might be possible to argue either that their issue began a few years earlier or that the rate of loss by wear was fractionally higher than 4% for old coins. This is, however, something best left to be reconsidered from the evidence of another, and earlier hoard.

II. The Effect of Cleaning on the Weight of the Coins

A group of 58 coins was made available for cleaning. They were studied with a view to establishing whether in any useful sense the cleaned weight reflected the original weights more reliably than the uncleaned weights. (The best evidence of this would have been if cleaning had resulted in a narrower dispersion of weights around the mean.) Each coin was weighed, then treated with cold, dilute (20%) formic acid (H_2CO_2) for one-half hour or so. It was then scrubbed with a stiff bristle or nylon brush, washed, dried, and reweighed. This still left some kind of surface "skin" or patina of a dull grey metallic character, but if the treatment was prolonged, there was a

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

tendency for bright metal to show through after brushing, on the high points. The further weight reduction after the first half-hour or so in acid was at a very slow rate.

Most of the coins were somewhat incrusted. The difference between the uncleaned and the cleaned weight therefore to some extent merely represented "dirt," and had no systematic value. A more valid comparison would involve treating a substantial number of unincrusted specimens. The minimum losses of weight were .013, .016, .019, .020, .021 (2), .022 (2) and .023 (2). The maximum observed loss was .067 gr., from a coin that was noted as being particularly heavily incrusted. The next highest losses were .056, .048, .047, .045 and .045 (2). The bulk of the observations were thus within a compact range. They did not approximate at all closely to a normal distribution, and an average is therefore meaningless. The best that can be said is that a typical loss on a coin that was free or almost free from incrustation may be presumed to be .02 to .03 gr. (2.5 to 3.5%).

Graphs were drawn to see whether there was any sign of a correlation between the observed percentage loss of weight and a) alloy (the earlier Achaian coins contain more silver); b) age of coin at date of deposit; c) mint; d) the observed weight in relation to the average weight for the type (i.e. a possible narrowing of the dispersion). There was no reason to suspect any positive correlation.

III. The Acarnania Hoard

Mingled with some parts of the Pylia hoard when they were sold by the original purchaser were coins with a quite different patina. They were a light chestnut-brown color, and were dry and rough to the touch. It can be reliably stated that they have no connection with the Pylia hoard. They are from a hoard said to have been found in Acarnania some time ago. The 49 specimens listed are probably only a residual parcel from the hoard, and no great weight should therefore be given to their evidence. The issues of Philip of Taranto for Achaia, of the same for Romania, and of Guy II of Athens are common in the Acarnania parcel, which is dated by one specimen of Mahaut (1316–18). The average weight (.806, as observed) is appreciably less than in the Pylia hoard.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Achaia

William II, **G.PRINCEPS**, variety b), .91, c), .88
G.PRINCE ACh, variety a), .87 (3)

Florent, variety b), .77, d), .81 (2)

Isabel, .80, .73 (2)

Philip of Savoy, variety a), .82, .79, .75, variety b), .77 (4)

Philip of Taranto, a) .88, .85, .81, .71, b) .91, .84, .78, .73, variety c) with **E E** beside châtel, .98, .85, .78 (11)

Mahaut, .87 (1)

Athens

William, a) .80, b) ✠×G·DV+·ΛTЄNIS / ▾ThЄBЄ▴CIVIS▾, .83, another similar, .75, ✠:G DVX·ATЄNЄS, .87, .79, c) .87, .66 (7)

Guy II, variety D-1, .85; Schl. XIII, 9, with ✠ GVI / ◎CIVIS, .75; with ✠ GVI / ◎CIVIS, .81, .77; with star below châtel, .89, .81, .76, .70, .69 (9)

Romania

Philip of Taranto, .99, .88, .88, .82, .79, .79, .77, .77, .71, .67 (10)

If these figures (mean, .807) are weighted to make them match the Pylia figures (mean, .834) their distribution corresponds closely, and they support the hypothesis of two weight standards.

Note: All computations of averages, and all the histograms, have been taken from the original weighings, which were to 3 decimal places on an Oertling balance. The above weights for the Acarnania hoard are correct to 2 decimal places.

IV. The Istanbul Hoard of 1871, the Naples Hoard of 1886 and the Rhodes Hoard of ca. 1927

These two hoards of Frankish deniers tournois from beyond Greece, which were not listed in *ABSA* 1960, are summarized here for convenience of reference, from the original publications, C. J. M. de Vogüé, "Monnaies et sceaux des Croisades," *Mélanges de Numismatique*, 2 (1877), pp. 168–95, and a note by Prof. de Petra accompanying an article by M. Ruggiero in *Notizie degli Scavi* 1886, p. 333; W. Schwabacher, "Zwei Denarfunde von ostgriechischen Inseln," *Deutsche Münzblatter* 1935, pp. 454–60.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The Istanbul hoard was found in the neighborhood of the city during de Vogüé's residence there. It contained the following coins:

Achaia	
William II	20
Charles I	4
Charles II (rectè I/II)	5
Florent	4
Isabel	19
Philip of Savoy	13
Philip of Taranto	25
Mahaut	14
John	3
Athens	
William	62
Guy II	50
Venice, grossi	15
Uncertain	1

The Naples hoard was discovered on March 16, 1886 in the Piazza del Municipia, and consisted of 1546 coins, of the following types:

Achaia	
William II	52
Charles I	12
Charles I/II	38
Florent	44
Isabel	118
Philip of Savoy	175
Philip of Taranto	231
Louis	5
Fernand	1
Maud	147
John	113
Robert	12
Athens	
Guy I [?]	2
William	201
Guy II	300

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Romania, Philip	215
Corfu	3
Arta, John	1
Great Wallachia, "Angelus"	6
Sulmona	
Carlo III di Duras, 1382–6	4
Ladislao, 1386–1414	1
Luco, Ladislao	1
Avella	1
Morea (worn)	800
French tournois	6
Uncertain tournois	5

The Rhodes hoard was bought from a resident by Engineer F. Guiol, and comprised 100 coins, of the following types:

Achaia	
William II	1
Charles I/II	1
Florent	2
Isabel	5
Philip of Savoy	9
Philip of Taranto	18
Fernand	1
Mahaut	8
John	19
Athens	
William	9
Guy II	18
Romania, Philip	6
Uncertain	3

V. The Effectiveness of Isabel's Recoinage in Renewing the Currency

We have only one hoard of Frankish tournois which antedates Isabel's reform—that from Xirokhori, concealed 1285–87—and it already contains 26% of the light weight Athenian issues, against 74% of the heavier Achaian, in spite of its Peloponnesian provenance.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The next hoard by date of deposit is Delphi 1933, concealed 1301–5, and here the proportions are reversed—27% Achaian pre-1299, 62% on the reduced standard (Achaian plus Athenian), and 11% from Lepanto. From 27/62/11 the proportions shift to figures typically between 11/75/14 and 6/84/10, in hoards from the second quarter of the fourteenth century, as may be seen from Table 3 below. The overall impression is of consistency, and the variations appear to be mainly regional. In the absence of sufficient hoard evidence from the Peloponnese from before ca. 1310, it is difficult to judge how far the old coinage had been melted down and replaced within the few years following the reform. One may guess, taking into consideration the Istanbul hoard of 1871 which may reflect the currency of the Peloponnese, that the proportion of better-alloy coins remaining in the currency was greater there than elsewhere. The proportion of coins on the Athenian standard was automatically rising from 1299, as the currency was supplemented with new issues. By about 1305, therefore, one may guess that there were, roughly, 10–20% of the heavy coins in the currency, except in the Peloponnese. It seems clear that a deliberate attempt had been made to withdraw the heavy coins, in the years immediately following the reform. Thereafter, no great effort was made to recover the remaining percentage.

The Pylia hoard stands out in Table 3 as containing an exceptionally large proportion of old coins. One must ask whether it could be to any extent a savings hoard; on this point a comparison of the loss of weight by wear among the older coins in the Pylia and in other hoards may eventually bring forward interesting evidence. For the moment, it seems more likely that the explanation will be found in terms of a net inward flow of currency into a rather distant region—as happens at the present day.

Hoard	*Deposit*	*Better-alloy*	*Post-reform*	*Lepanto*
Xirokhori	1285–87	74	26	0
Delphi 1933	1301–05	27	62	11
Pylia	ca. 1310	47	47	6
Delphi 1929	1311?	11	75	14
Acarnania	1315–20	10	69	21
Attica 1951	1318–20	11	74	15

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Hoard	*Deposit*	*Better-alloy*	*Post-reform*	*Lepanto*
Tritaea	1320–25	12	74	14
Orion	1320–25	7	82	11
Atalandhi	1325–30	6	87	7
Delphi 1894 β	1325–40	7	83	10
Istanbul	1325–40	15	85	0
Delphi 1894 Γ	1339–44	6	82	12
Rhodes	1345–50?	4	90	6
Patras	1343–55	4	86	10
Kaparelli	1356–63	6	92	2
Elevsis 1952	1365–80	6	84	10
Naples	1387–1400	9	78	13
Delphi 1894 A	1400–20	10	76	14

TABLE 3. The proportions in various hoards of (1) better-alloy coins (including those of Florent), (2) Athenian and Achaian post-reform issues, (3) coins of Lepanto. Sources: *ABSA* 1960; Table 1; Appendices III and IV. Note: some of the hoards are incompletely recorded.

VI. DENIERS TOURNOIS AND THE URBAN TOPOGRAPHY OF MEDIAEVAL CORINTH

Some 650 deniers tournois were recovered as stray finds in the excavations of the American School of Classical Studies up to 1939 on the site of Old Corinth. Those from the years 1896–1929 have been fully listed by Miss K. M. Edwards, while those from 1930–35 and 1936–39 have been published only summarily, and in such a way that the totals include the copper as well as the billon issues in the early Frankish series.

A preliminary breakdown of the totals shows the following numbers of deniers tournois (excluding those in the hoard of May 1934):

	1896–1929	*1930–35*	*1936–39*
French royal issues	45 = 24%	30 = 14%	29 = 12%
Feudal issues	17 9%	18 8%	17 7%
Frankish issues	128 67%	167 78%	201 81%
	190	215	247

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The first point to be made is that there are proportionately far more royal and feudal issues than are found in the hoards (e.g., Xirokhori, 1.8%; Attica, 1.4%; Orion, 0.2%; Delphi 1894 β, 0.3%). As the rate of casual losses may be expected to be in direct proportion to the quantities in circulation and to the length of time for which the coins circulated (the size and value of the two kinds being the same) it seems inescapable that there was a period, of some duration, when royal and feudal tournois made up an important part, if not the whole, of the tournois currency of Corinth.

The second point is that the proportions vary more than might have been expected, between the successive periods of excavation: 24% of royal issues in 1896–1929, but only 12% in 1936–39. The reason is that there are topographical differences in the patterns of losses within the Central Area of the Corinth excavations. As far as the tournois are concerned, there are "early" excavation sections and "late" sections. The "early" sections are mostly to the north of the main Plateia, that is, on the lower side of the town, away from Acrocorinth, and it so happens that they were excavated earlier. The evidence is clear-cut. The earlier tournois from the three periods of reporting may be provisionally listed as follows:

	1896–1929	1930–1935	1936–1939
St. Martin of Tours			
SCS MARTINVS / TVRONVS CIVI	13	11	7
Philip II			
PHILIPVS REX / TVRONVS CIVI	1	5	2
PHILIPVS REX / SCS MARTINVS	6		
Louis VIII and IX, 1223–6, 1226–70			
LVDOVICVS REX / TVRONVS CIVI CIVIS	38	25	27
Alphonse of Poitiers			
ALFVNS COMES / PICTAVIENSIS	1		2
A COMES TOLOSE / MARCh PVINCIE	1		3
Charles of Anjou			
K.CO.P.FI.RE.F / PVINCIALIS	2	7	4

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

	1896–1929	1930–1935	1936–1939
William of Villehardouin			
G.PRINCEPS / CLARENTIA	23	34	27
G.PRINCE ACh / CLARENTIA	14	22	24
TVRONVS CIVI / D.CLARENTIA } **DE CLARENTIA** }	4		
Charles I			
K.R.PRINC'ACh / CLARENTIA	6	6	10
Later tournois (after ca. 1280)	80	95	138
Uncertain		10	3
	190	215	247

In the North Market, excavated in 1929 (see the Map below), no fewer than 7 specimens of **SCS MARTINVS / TVRONVS CIVI**

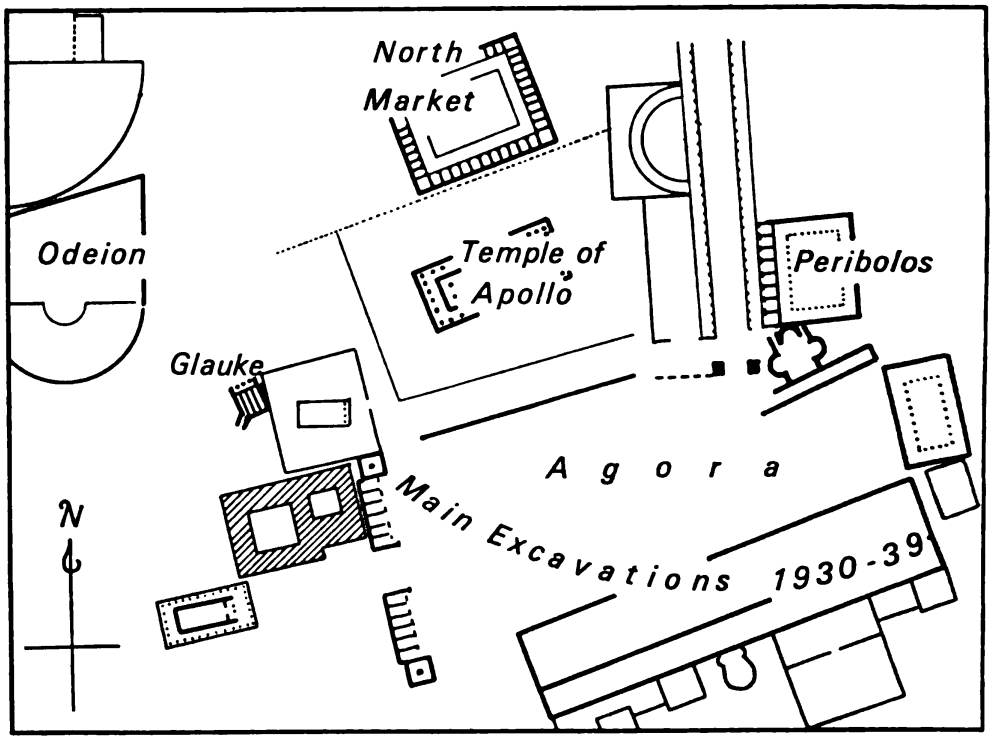


FIG. 17. The Central Area of the Corinth excavations, to show the sections referred to in the text.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

were found, all separately; 3 of Philip Augustus (2 with **SCS MARTINVS**); and 6 of Louis VIII or IX (4 with **CIVI**, 2 with **CIVIS**). In addition, about a hundred copper coins (Schl. plate XII, 7 and 10) were found in this section. North of the Temple of Apollo (excavated in 1926) were found 4 coins in the name of Louis (3 with **CIVI**, 1 with **CIVIS**) and two later tournois. In the Odeion (excavated in 1927) there were 3 separate finds of **TVRONVS CIVI / DE CLARENTIA** and 2 of **TVRONVS CIVI / SCS MARTINVS**, one of Philip II, and 4 of Louis (all reading **CIVI**). There were also 4 Achaian issues of William, one of Charles I, and 2 later tournois. In the Glauke section (1925) there were found 2 more coins of Philip (**SCS MARTINVS**) and 4 of Louis (**CIVI**), and 3 later tournois. The seventh coin of Philip was found to the north of the Peribolos, in a section which also yielded a **SCS MARTINVS / TVRONVS CIVI**, 7 coins of Louis (2 with **CIVI** and 5 with **CIVIS**), 2 early Achaian tournois and 6 later tournois.

Once it has been established that the statistics are not distorted by the inclusion of any little hoards, even the subtotals for the different early types are sufficient evidence that the forerunners of the Achaian tournois were the French royal coins and the abbatial issues of Tours, and not Provençal or Poitevin coins. The absence of the latter from the excavation sections, particularly toward the north of the Central Area, where early tournois losses were dominant, confirms this conclusion, and explains why the first Achaian tournois should have been struck on the French weight standard.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

ADDITIONS TO ZAMBAUR'S *MÜNZPRÄGUNGEN DES ISLAMS*

GEORGE C. MILES

The value of Eduard von Zambaur's *Die Münzprägungen des Islams*, completed in 1943 but published posthumously only in 1968,[1] can scarcely be overestimated. With its comprehensive bibliography and elaborate reference apparatus it is an indispensable tool for anyone doing research in Islamic numismatics and history. The work was the final fruit of the great Austrian scholar's indefatigable recording over many years of the issues of all Muslim mints west of India that had come to his attention either in the numismatic literature or in public and private collections. In the past twenty-seven years since Zambaur completed his work a number of previously unrecorded mints have been "discovered" and have received notice in widely scattered publications; and it has occurred to the writer that it might serve a useful purpose to list such "new" mints (over 50 in number) as have come to his attention, together with brief bibliographical references. Doubtless there are many others which have escaped his notice and it is to be hoped that correspondents will call attention to such omissions.

1. اتريب – Atrīb: Egypt, ancient Athribis. G. C. Miles, *Rare Islamic Coins*, *ANSNNM* 118 (New York, 1950). (Umayyad)
2. اذنة – Adhanah: Adana, Anatolia. Listed by Zambaur but without reference to any coin. G. C. Miles, *Rare Islamic Coins* ('Abbāsid)
3. اردنج – Ardanuch: Anatolia, southeast of Artvin. Nuri Pere, *Osmanlılarda Madenî Paralar* (Istanbul, 1968). (Ottoman)
4. اسداباد – Asadābād: Jibāl, near Hamadān. G. C. Miles, "The Coinage of the Kākwayhid Dynasty," *Iraq* V (1938), and "A Hoard of Kākwayhid Dirhems," *ANSMN* 12 (1966). (Kākwayhid)

[1] *Die Münzprägungen des Islams, zeitlich und örtlich geordnet, I. Band, Der Westen und Osten bis zum Indus mit synoptischen Tabellen, herausgegeben von Peter Jacckel* (Franz Steiner Verlag, Wiesbaden, 1968).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

5. اشمون (مدينة) – Madīnat Ashmūn: Middle Egypt, ancient Hermopolis Magna, modern al-Ushmūnain. G. C. Miles, "The Early Islamic Bronze Coinage of Egypt," *ANS Centennial Volume* (New York, 1958). (Ṭūlūnid?)

6. اقريطش – Iqrīṭish: Khandaq, modern Herakleion, Crete. G. C. Miles, *The Coinage of the Arab Amirs of Crete, ANSNNM* 160 (New York, 1970). (Amirs of Crete)

7. ام القرى – Umm al-Qurâ: Mecca. (Saudi Arabian)

8. اهناس (مصر) – Ahnās (Miṣr): Egypt, ancient Herakleopolis, modern Ahnāsya. R. Curiel, "Monnaie de bronze d'Ahnās-Miṣr," *RN* 1968. (Umayyad)

9. بالس – Bālis: Between Aleppo and Raqqah, ancient Barbalissos. N. M. Lowick, *ANSMN* 16 (1970). (Ṭūlūnid)

10. برشنونة – Barshinūnah: Barcelona. G. C. Miles, "Bonnom de Barcelone," *Études d'Orientalisme dédiées à la mémoire de Lévi-Provençal* (Paris, 1962). (Count of Barcelona)

11. برمقباذ – Birāmqubādh: Fārs. J. Walker, *BMC* II (London, 1956). (Umayyad)

12. بگشهری – Beğsheriri: Anatolia, Konya vilayet. Şerafettin Erel, *Nâdir birkaç sikke* (Istanbul, 1963). (Eshrefoğulları)

13. بنيان – Bünyān: Anatolia, Kayseri vilayet. Şerafettin Erel, *Nâdir birkaç sikke.* (Ilkhānid)

14. بهرسير – Bahurasīr: ʿIrāq, opposite ancient Ctesiphon. J. Walker, *BMC* II, p. 296. (Umayyad)

15. بهقباذ الاوسط – Bihqubādh al-awsaṭ: ʿIrāq. G. C. Miles, *Rare Islamic Coins.* (Umayyad)

16. بوصنه سراى – Bōsnah Saray: Sarajevo. Variant of بوسنه سراى. Şerafettin Erel, *Nâdir birkaç sikke.* (Ottoman)

17. بيسن – Baysan: Jordan Valley, Biblical Bethshan. A. R. Bellinger, *Coins from Jerash,* 1928–1934, *ANSNNM* 81 (New York, 1938). (Arab-Byzantine and Umayyad)

18. توج – Tawwaj: Fārs, district of Ardashīr-Khurrah. G. C. Miles, *Excavation Coins from the Persepolis Region, ANSNNM* 143 (New York, 1959). (ʿAbbāsid)

19. تون – Tūn: Qūhistān. N. M. Lowick, "Shaybānid Silver Coins," *NC* 1966. (Shaybānid)

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

20. تيره ديار ايدن – Tīre Diyār Aydin: Anatolia, Tīre, Izmir vilayet, variant of تيره. Ibrahim Artuk, *Fatih'in Sikke ve Madalyaları* (Istanbul, 1946). (Ottoman)
21. ثغر سكندرية – Thaghr Skandarīyah: the port (?) of Alexandria. Paul Balog, *The Coinage of the Mamlūk Sultans of Egypt and Syria ANSNS* 12 (New York, 1964). (Mamlūk)
22. ثغر الشامية – Thaghr al-Shāmīyah: Syrian frontier, Maṣṣīṣah. Ulla S. Linder Welin, "Sayf ad-Dawlah's Reign in Syria...," *Commentationes de nummis saecularum IX–XI in Suecia repertis* (Stockholm, 1961). (Ḥamdānid)
23. ثغر قزوين – Thaghr Qazwīn: Qazwīn. Ulla S. Linder Welin, "Ein grosser Fund arabischer Münzen aus Stora Velinge, Gotland," *Nordisk Num. Årsskrift*, 1941. ('Alid)
24. الثغور الشامية طرسوس – Al-Thughūr al-Shāmīyah Ṭarsūs: Ṭarsūs. G. C. Miles, "Islamic Coins from the Tarsus Excavations of 1935–1937," *The Aegean and the Near East, Studies presented to Hetty Goldman* (Locust Valley, 1956). ('Abbāsid)
25. الثغور ميفرقين – Al-Thughūr Mayyafariqīn: Mayyafariqīn. Ulla S. Linder Welin, *Commentationes*. (Ḥamdānid)
26. جبرين – Jabrīn: Palestine, between Jerusalem and Ghazzah, identical with Bait Jabrīn. J. Walker, *BMC* II. (Arab-Byzantine)
27. جلالاباد – Jalālābād: Location uncertain, Ṭarm or Adharbayjān. S. M. Stern, "The early Ismā'īlī Missionaries in north-west Persia and in Khurāsān and Transoxania," *BSOAS* 23 (1960). (Musāfiride)
28. جور – Jūr: Fārs, Fīrāzābūd. G. C. Miles, *Persepolis*. ('Abbāsid)
29. الخزانة الشامية من حلب – Al-Khazānah al-Shāmīyah min Ḥalab: the Treasury in Ḥalab. Ulla S. Linder Welin, *Commentationes*. (Ḥamdānid)
30. الدملوة – Al-Dumluwah: Yemen (Yāqūt II, pp. 599–600). Şerafettin Erel, *Nâdir birkaç sikke*. (Ayyūbid)
31. دوجنك – Dūjanak: Unidentified, Irān. H. L. Rabino di Borgomale, *Coins, Medals and Seals of the Shâhs of Irân* (London, 1945). Ṣafavid)
32. ذو جبلة – Dhū Jiblah: Yemen, between 'Adan and Ṣan'ā. N. M. Lowick, "Some unpublished dinars of the Ṣulayḥids and Zuray'ids," *NC* 1964. (Ṣulayḥid)

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

33. سردد – Surdud: Yemen, al-Mahjan (?), between Zabīd and al-Luḥaya. Samir Shamma, "A Hoard of Fourth Century Dinars of Yemen," *ANSMN* 17 (1971). ('Abbāsid)
34. سفاقس – Safāqus: Sfax, Tunisia. G. C. Miles, *The Coinage of the Umayyads of Spain*, *ANSHNS* 1 (New York, 1950). (Umayyads of Spain)
35. طرطوس – Ṭarṭūs: Syrian coast. J. Walker, *BMC* II. (Arab-Byzantine)
36. العسكر المنصور – Al-'Askar al-Manṣūr: Jibāl. Unpublished, private collection. (Kākwayhid)
37. غرستان – Gharistān: southern Khurāsān. Ulla S. Linder Welin, "Some rare Samanid dirhams and the origin of the word 'mancusus'," *Congresso Internazionale di Numismatica*, 1961, Vol. II, *Atti* (Rome, 1965).)Sāmānid)
38. القدس – Al-Quds: Jerusalem. N. G. Nassar, "The Arabic Mints in Palestine and Trans-Jordan," *Quarterly of the Department of Antiquities in Palestine* XIII (1948); Behzad Butak, *Resimli Türk Paraları'na Ek* (Istanbul, 1948). ('Abbāsid, Mamlūk)
39. القصر – Al-Qaṣr: Kurdistān, possibly Qaṣr al-Luṣūṣ. G. C. Miles, "A Hoard of Kākwayhid Dirhems," *ANSMN* 12. (Kākwayhid)
40. قوصوه – Qoṣowa: Kosova, Serbia. Nuri Pere, *Osmanlılarda Madenî Paralar*. (Ottoman)
41. الكرخا – Al-Karkhā: Khūzistān. Unpublished, National Museum, Damascus. ('Abbāsid)
42. گرميان – Germiyān: Anatolia, Kūtahya (= Shahr-Karmiān). Şerafettin Erel, *Nâdir birkaç sikke*. (Germiyān Oğulları)
43. گندمان – Gandimān: perhaps كندوان, Kundwān (Yāqūt IV, p. 310), near Marāghah, Adharbayjān. ANS, unpublished. (Muẓaffarid)
44. كورة بدخشان – Kūrat Badakhshān: Badakhshān. ANS, unpublished over-sized dirhems. (Sāmānid)
45. كورة المهدية من فارس – Kūrat al-Mahdīyah min Fārs, Fārs: district of Ardashīr-Khurrah (Jūr). G. C. Miles, *Persepolis*. ('Abbāsid)
46. مسبذان – Māsabadhān: west of Little Lūr, in Jibāl, sister district of Mihrjānqudhaq (see below). S. Album, *ANSMN* 17 (1971). (Umayyad)
47. مدينة ابراهيم بن محمد – Madīnat Ibrāhīm b. Muḥammad: probably Marv, Khurāsān. Unpublished, private collection. (Ṭāhirid)

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

48. مدينة العواصم – Madīnat al-ʿAwāṣim: probably Antioch. Ulla S. Linder Welin, *Commentationes*. (Ḥamdānid)

49. معدن امير المؤمنين بالحجاز – Maʿdin amīr al-mu'minīn bi'l-Ḥijāz: Ḥijāz, probably Maʿdin Bani Sulaym. G. C. Miles, *Rare Islamic Coins*, and "ʿAli b. ʿĪsâ's Pilgrim Road," *Bull. de l'Inst. d'Égypte* 36 (1953–54). Zambaur referred to this issue under the entry "Ḥijāz," but at that time the full name of the mint had not been read. (Umayyad)

50. معسكر الامام – Muʿaskar al-Imām: probably the same as Madīnat al-Mukhtārah, south of al-Baṣrah. G. C. Miles, "Trésor de dirhems du ix^{e} Siècle," *Mém. de la Mission Arch. en Iran*, 37 (Paris, 1960). (Zanj)

51. مغنيسى – Maghnīsâ: Anatolia, Manīsa, ancient Magnesia ad Sipylum. Listed by Zambaur under the Frankish form Manglasia on coins of the Sarukhan; listed as "Manisa," but Arabic spelling not indicated, by Nuri Pere, *Osmanlılarda Madenî Paralar*. (Ottoman)

52. المنصورة – Al-Manṣūrah: Al-Fīl, Khwārazm. J. Walker, *BMC* II; cf. Ulla S. Linder Welin, "The Coins from Khwārazm and the Swedish Viking Age Hoards," *Meddelanden från Lunds Universitets Historiska Museum*, 1961. (Umayyad)

53. مهرجانقذق – Mihrjānqudhaq: Jibāl, Ṣaymarah. Daniel Eustache, "Monnaies musulmanes trouvées à Volubilis," *Hespéris* 1956. (Umayyad)

54. نهربوق – Nahrbūq: ʿIrāq, vicinity of Baghdād (Yāqūt IV, p. 836). Unpublished, National Museum, Damascus. (Umayyad)

55. نيگده – Niğde: Anatolia, between Kayseri and Ulukışla. Şerafettin Erel, *Nâdir birkaç sikke*. (Qaramānid)

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

A HOARD OF FOURTH CENTURY DINARS FROM YEMEN

(PLATE XLIII)

SAMIR SHAMMA

Yemen in the fourth century H. was virtually independent of Baghdad; al-Muṭīʿ, the ʿAbbāsid Caliph, from 334 to 363 H. (A.D. 945–973), was too weak to extend his power beyond the capital and the Būyids were too occupied to concern themselves with a people so far removed from the seat of government.

The ruler in Yemen during most of the fourth century was Isḥāq b. Ibrāhīm (311–371 H./A.D. 923–981), the fourth governor of the Bani Ziyād dynasty. The founder of the dynasty, Muḥammad b. Ziyād, had been appointed Chief Governor of Yemen in 203 H. by the Caliph al-Maʾmūn. Isḥāq paid nominal allegiance to the caliph in Baghdad and, in turn, received token allegiance as a matter of form from many of the various self-proclaimed amirs who established themselves in Yemen.

An interesting group of dinars has recently been acquired which adds to the meager record of this period of Yemen's history. No information is available about the exact provenance (though it is known to be in southwestern Arabia) or about the circumstances of their discovery, nor can it be certain that what has been acquired is the total number of coins found. Part of the hoard found its way to two private collectors in Cairo and Beirut; it is likely that another part was melted by a goldsmith. How much of the hoard is represented by the extant specimens is unknown.

The coins will undoubtedly fill one of the major lacunae in the numismatic history of the respective period in this part of the Arabian Peninsula. They form an important addition to the scanty list of published coins of Yemen; most are unpublished varieties, and among them is one unrecorded mint.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Caliph	*Ruler*	*Mint*	*Date* A.H.
al-Muttaqī		Baysh	331, 332
al-Mustakfī		Baysh	334
al-Muṭīʿ		ʿAdan	337, 338, 340, 342, 343, 345, 346, 347, 348, 349
		Baysh	335, 336, 338,[1] 340, 341, 342, 343
		Surdud	339, 341
		Zabīd	341
al-Muṭīʿ	Isḥāq b. Ibrāhīm	Zabīd	346,[2] 347, 349, 350, 352, 353, 354,[3] 355, 356,[4] 357, 359, 360, 361, 362
al-Muṭīʿ	Abu ʿAli Muḥammad b. al-Qāsim	ʿAdan	346, 347, 348, 349, 350, 351, 353, 354, 355, 357, 359

These preserved coins are distributed fairly evenly over a period of 31 years. The mints are: ʿAdan, Baysh, Surdud and Zabīd. Surdud, which is 80 miles north of Zabīd, is a hitherto unrecorded mint. It is interesting to note that the two coins of Surdud, struck in the name of al-Muṭīʿ alone, are of the years 339 and 341 H. No dinars of al-Muṭīʿ were found from ʿAdan for these two years and none for 339 from Baysh. The only year in which a dinar of al-Muṭīʿ seems to have been minted in Zabīd is 341 H., when no dinars in his name were struck in ʿAdan. The earliest dinars found with the name of Isḥāq b. Ibrāhīm were for the year 346, his last for the year 362. Dinars for three dates are missing: 348, 351, 358. It is not known whether dinars for those years are in the possession of the other two private collectors or might be found later. However it may be noted that in the year

[1] Markov, *Inventory Catalogue of Musulman Coins in the Hermitage* (St. Petersburg, 1896), p. 65, published a dinar of 339 minted in Bīsha (بيشة؟).
[2] A similar coin was published by Lane-Poole, "Fasti Arabici," *NC* 1887, p. 325, no. 1, and appeared in the J. Schulman sale of June 26, 1905 (White-King), no. 2281.
[3] Markov, p. 343.
[4] Casanova," Dinars inédits du Yémen," *RN* 1894, p. 200, no. 1.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

358 the Fāṭimids conquered Egypt and the *khuṭba* in the name of the ʿAbbasīd caliph was discontinued in Egypt, Syria, Hijaz and Yemen.[5] In Ramaḍān, the 9th month of the year, 362 H., al-Muʿizz, the Fāṭimid, arrived in Egypt. No coins in the name of the ʿAbbasīd vassal, Isḥāq b. Ibrāhīm are known dated after 362 H., although he ruled till 371 H. No coins in Isḥāq's name were issued in any part of Yemen except Zabīd, the seat of his rule.

Abu-ʿAli Muḥammad al-Qāsim seems to have been a local Governor of ʿAdan. His name is preserved to us only on the coins recorded here. Abu-ʿAli must have owed nominal allegiance to the aged Chief Governor of Yemen, Isḥāq b. Ibrāhīm and paid him part of the revenues from ʿAdan, but from his dinars it is evident that he recognized the ʿAbbasīd caliph in Baghdad, al-Muṭīʿ, as his ultimate sovereign and, although a local vassal of Isḥāq owing nominal allegiance to him, he did not deem it necessary to mention Isḥāq's name on the coins he issued in ʿAdan.

With the exception of Isḥāq's dinars of fine workmanship, there is a close similarity in fabric and style among the fourth century issues described below. The standard of workmanship is rather poor. The engraving is degenerate, with bold yet clumsy characters. There are orthographic irregularities such as the writing of 300 in two words, and some numbers are not fully written. The "teeth" of certain letters are not always uniform in number; in the *sīn* of Surdud on the dinar of 341, for example, there are only two teeth, while on the dinar of 339 there are three. There are isolated letters at the bottom of the field on most of the specimens. The coins are all half-dinars although called dinars and they are struck on wide, exceptionally thin flans. The weights vary between 2.65 and 2.85 gr.

1. *al-Muttaqī*, Baysh, 332 H., *Æ*, 22.5 mm., 2.65 gr. (PLATE XLIII).

Obv.: within a circle:

لا اله الا
الله وحده
لا شريك له
ء ح

Rev.: within a circle:

لله
محمد
رسول الله
المتقى لله
ح

[5] Ibn Taghribardi, *Al-Nujūm Al-Zāhirah*, Book IV, the events of the year 358 H.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Margin within two circles:
بسم الله ضرب هذا الدينار ببيش
سنة ثنتين وثلثين وثلث مية

Margin between inner double circle and outer single circle:
جاء الحق وزهق الباطل ان الباطل كان زهوقا ونزل من القرآن ما هو شفاء

A similar coin, but of al-Muṭīʿ, is recorded by George C. Miles in *Rare Islamic Coins*, *ANSNNM* 118 (New York, 1950) p. 54, no. 203, pl. 8. Miles attributed it to Tustar in Persia "as a last resort." On this coin the word is clearly Baysh (بيش). Miles also noted that the reverse margin of his no. 203 was completely obscure. An enlarged reverse of a dinar of al-Muṭīʿ from the hoard (Baysh, 341 H., 22.5 mm., 2.85 gr.) is depicted on Plate XLIII, A. The margin جاء الحق وزهق الباطل ان الباطل كان زهوقا ونزل من القـ can be somewhat more clearly read.

2. *al-Mustakfī*, Baysh, 334 H., *Æ*, 23 mm. 2.80 gr. (PLATE XLIII).

Obv.: as 1. but س instead of ع ج

Margin:
بسم الله ضرب هذا الدينار ببيش
سنة اربعة وثلاثين وثلث مية

Rev.:
لله
محمد
رسول الله
المستكفى بالله
س

Margin: as 1. جاء الحق الخ

3. *al-Muṭīʿ*, ʿAdan, 347 H., *Æ*, 24 mm., 2.80 gr. (PLATE XLIII).

Obv.:
لا اله الا
الله وحـده
لا شريك له
ء

Margin:
بسم الله ضرب هذا الدينار سنة سبعة واربعين وثلثمية عام (؟) لله

Rev.:
لله
محمد رسول الله
المطيع لله
•

Pellet beneath rev. area.
Margin: as 1.

The style of this dinar is different from that of the other dinars.

4. *al-Muṭīʿ*, Zabīd, 341 H., *Æ*, 23 mm., 2.80 gr. (PLATE XLIII).

Obv.:
لا اله الا
الله وحده
لا شريك له
ء O

Pellet above ه of وحده.

Margin:
بسم الله ضرب هذا الدينار سنة واحد واربعين ثلمر

Rev.:
لله
محمد
رسول الله
المطيع لله
ح

Margin: As 1.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

This is very crudely executed. It is the only known coin of al-Muṭī‘ alone struck in Zabīd.

5. *al-Muṭī‘*, Surdud, 339 H., Æ, 23.5 mm., 2.75 gr. (PLATE XLIII).

Obv.: لا اله الا
الله وحده
لا شريك له
O ماله

Rev.: As 4.

Margin: As 1.

Margin:
بسم الله ضرب هذا الدينار بسردد سنة تسع وثلث

Surdud is recorded as a mint for the first time.

6. *Isḥāq b. Ibrāhīm*, Zabīd, 359 H., Æ, 23 mm., 2.85 gr. (PLATE XLIII).

Obv.: لا اله الا
الله وحده
لا شريك له
C ى

Rev.: لله
محمد
رسول الله
المطيع لله
اسحق بن ابراهيم

Inner Margin:
بسم الله ضرب هذا الدينار بزبيد سنة تسع وخمسين وثلثمية

Outer Margin: As 1.
لله الامر من قبل ومن بعد ويومئذ يفرح المؤمنون بنصر الله

7. *Prince abu-‘Ali Muḥammad b. al-Qāsim*, ‘Adan, 357 H., Æ, 24 mm., 2.85 gr. (PLATE XLIII).

Obv.: لا اله الا الله
محمد رسول الله
المطيع لله

Rev.: امر به الامير
ابو على محمد
ابن القسم
للـلله

Margin:
بسم الله ضرب هذا الدينار بعدن سنة سبع وخمسين وثلثمية

Margin: As 1.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

AN UMAYYAD HOARD FROM AFGHANISTAN

(PLATES XLIV–XLVI)

STEPHEN ALBUM

Recently I had the good fortune to acquire a hoard of 131 Umayyad silver dirhems that was unearthed in Afghanistan some time in or shortly before 1967 and which subsequently turned up in the bazaar in Kabul.[1] The hoard is definitely incomplete (at the very least, it is known that a small number of damaged and broken coins had been melted) but there is no doubt that the remaining 131 coins were part of a single hoard. Among the specimens are five unpublished coins including one which records a new Umayyad mint, Māsabadhān. Surprisingly, 85 of the coins are from mints other than Wāsiṭ (65% of the hoard), whereas in the more frequent situation, not more than 10% to 15% are other than Wāsiṭ. In all, 27 mints are represented, and their distribution is of interest for examining commercial patterns in the Umayyad caliphate. The distribution of the hoard is markedly similar to that of a hoard published in 1966 by R. J. Hebert.[2] The date range is 86 to 112 A.H., also similar to Mr. Hebert's hoard.

THE HOARD

1. Adharbaijān 105 A.H. 2.85 gr. Walker, p. 106, P.57.[3]
2. Ardashīr Khurra 97 A.H. 2.88 gr. Walker 263, but no point in reverse marginal legend, and point below *alif* of *kufu'an*. (PLATE XLIV).
3. Madīna Balkh al-Baiḍā 112 A.H. 2.93 gr. Unpublished. (PLATE XLIV).

   Obv.: As Walker, p. 128, B.22 but بمدينة بلخ البيضا سنة ثنتى عشرة ومئة
   Large pellet in field as on the Berlin specimen of 111 A.H.
   Marginal points: ∴ ∴ ∴ ∴

[1] The precise provenance of the hoard is unknown.

[2] "Notes on an Umayyad Hoard from Khurāsān," *ANSMN* 12 (1966) pp. 157–163.

[3] *Catalogue of the Muhammadan Coins in the British Museum*, II. (London, 1956).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Rev.: *Waw* at end of second line.

This mint, as Walker points out (p. lxxv) is probably the same as Balkh, with the distinguishing epithet, "the white," affixed. If so, is then perhaps the earliest known instance in Islamic numismatics of the use of an epithet with the name of a mint city.

4–11. al-Baṣra 100 A.H. 2.94, 2.93, 2.93, 2.75, 2.59, 2.95, 2.94, 2.92 gr. Walker 305.

12. al-Baṣra 101 A.H. 2.94 gr. Walker 306. Struck from a corroded reverse die.

13. Dārābjird 92 A.H. 2.95 gr. Walker 341.

14–16. Dārābjird 95 A.H. 2.92, 2.87, 2.85 gr. Walker 344, but *kariha* is correctly spelled (كره) (PLATE XLIV, 14).

17. Dārābjird 96 A.H. 2.88 gr. Walker 345, but no point under *h* of *ḥaqq*.

18. Dastawā 90 A.H. 2.91 gr. See Walker, p. 141, note 3. This coin has not been published with a description.

Obv.: As usual, but بدستوا فى سنة تسعين No points.

Rev.: *W* at end of second line. Central point below *l* of *lam*. No additional points. (PLATE XLIV).

19. Dastawā 92 A.H. 3.07 gr. Walker 349. This is the heaviest coin in the hoard, the only piece to exceed three grams. It is not at all worn or damaged. (PLATE XLIV).

20. Dastawā 97 A.H. 2.92 gr. Walker, p. 142, P.76 (PLATE XLIV).

21. Hamadān 98 A.H. 2.94 gr. Walker, p. 190, P.111. (PLATE XLIV).

22. Harāt 91 A.H. 2.89 gr. Walker 516, but date correctly written as احدى و تسعين; no points on obverse. (PLATE XLIV).

23. Iṣṭakhr 92 A.H. 2.96 gr. Walker 271, but no central point on reverse.

24. Iṣṭakhr 93 A.H. 2.94 gr. Walker 272, but on reverse, the words دين الحق are correctly written.

25. Iṣṭakhr 96 A.H. 2.90 gr. Walker 275.

26. Iṣṭakhr 97 A.H. 2.69 gr. Walker 276.

27. Iṣṭakhr 98 A.H. 2.93 gr. Walker 277.

28. Jayy 96 A.H. 2.90 gr. Walker, p. 137, B.27.

29-30. Kirmān 93 A.H. 2.92, 2.93 gr. Walker 458, but no points on reverse.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

31. Kirmān 101 A.H. 2.93 gr. Walker 464.
32. Māhī 93 A.H. 2.72 gr. Walker 475. Slightly clipped.
33. Manādhir 91 A.H. 2.90 gr. Walker 501[a] but no graffito, and on reverse, large pellet below *k* of *kufu'an*. (PLATE XLV).
34. Manādhir 94 A.H. 2.84 gr. Walker 504.
35. Manādhir 95 A.H. 2.81 gr. Walker 506.
36. Marw 94 A.H. 2.90 gr. Walker ANS.32, but on obverse, central point above *h* of *allāh*. The *q* of *al-ḥaqq* on reverse margin is written identically to a *w*. (PLATE XLV).
37–38. Marw 95 A.H. 2.89, 2.69 gr. Walker 494, but central point above *w* of *waḥdahu*.
39–40. As 37–38 but no obverse central point. 2.92, 2.90 gr.
41. Marw 99 A.H. 2.72 gr. Walker 496, but on reverse, additional point below *ṣ* of *al-ṣamad*.
42–43. As 41 but two points below *sharīk* instead of one (cf. Walker 497 for 100 A.H.). 2.92, 2.87 gr.
44–45. Marw 102 A.H. 2.81, 2.95 gr. Walker 497.
46. Marw 102 A.H. 2.92 gr. Unpublished.
Obv.: As usual, but بمرو فى سنة اثنتين ومئة. One point below *r* of *sharīk* and a point between *fī* and *sana* in margin.
Rev.: Central point below left side of *d* of *al-ṣamad*. No additional points. *w* at end of second line. (PLATE XLV).
47–50. Marw 110 A.H. 2.96, 2.93, 2.91, 2.97 gr. Walker 499.
51. As 47–50 but point under *l* of *lahu*. 2.94 gr. (PLATE XLV).
52–55. al-Mubāraka 108 A.H. 2.88, 2.94, 2.97, 2.99 gr. Walker 482.
56–60. al-Mubāraka 109 A.H. 2.96, 2.94, 2.95, 2.93, 2.99 gr. Walker 483, but no point below *'ain* of *tis'*. Note that the usual five annulets appear on reverse border. (PLATE XLV).
61. al-Mubāraka 110 A.H. 2.94 gr. Walker 484.
62. Māsabadhān 90 A.H. 2.90 gr. Unpublished mint. (PLATE XLV).
Obv.: بمسبذان فى سنة تسعين. Faint central point between *w* and *ḥ* of *waḥdahu*.
Rev.: As usual. Marginal legend begins at 3 o'clock. Central point midway between *d* of *al-ṣamad* and *l* of *lam*.

The district of Māsabadhān lay just west of Little Lur in Jibāl and was the sister district of Mihrjānqudhaq (G. Le Strange, *The Lands of the Eastern Caliphate*, p. 202). Its chief town was Sīrawān. The

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

omission of the first *alif* in the writing of the name would not be unexpected in Umayyad times: compare, for example, dirhems of Birāmqubādh, Dārābjird, Hamadhān, where *alifs* are omitted. On the other hand it is just possible that Ṭabari (I, 2477, etc.), Mas'ūdi (VI, 187), Muqaddasi (257) and Yāqūt (IV, 393) may have been mistaken in spelling the name *Māsabadhān* instead of *Masabadhān* (etymologizing the name as *Māh Sabadhān*), in which case this dirhem provides us with the correct orthography. The discovery of this new Umayyad mint name is of particular interest in the light of the relatively recent identification of the mint of Mihrjānqudhaq (D. Eustache, *Hespéris* 1956, p. 166).[4]

63. Nahr Tīrâ 90 A.H. 2.90 gr. Walker 511.
64. Nahr Tīrâ 95 A.H. 2.90 gr. Walker, p. 187, AUB.4 (PLATE XLV).
65. Qūmis 91 A.H. 2.71 gr. This date has never been published with a full description, although it has been reported (Walker, p. 170, note 3). PLATE XLV).
    Obv.: As usual, but بقومس فى سنة احدى وتسعين No central points or other points.
    Rev.: Central point midway below *d* of *al-ṣamad* and *l* of *lam*, and *waw* at end of second line.
66. Rāmhurmuz 92 A.H. 2.92 gr. Similar to Walker, p. 153, Dam.3, but date is correctly written اثنتين وتسعين (PLATE XLVI).
67. al-Rayy 94 A.H. 2.96 gr. Walker 410. (PLATE XLVI).
68. al-Rayy 95 A.H. 2.94 gr. Walker, p. 155, ANS.27; the mint name more closely resembles الحى than الرى but when compared with no. 67 above, there can be no coubt that al-Rayy is intended. (PLATE XLVI).
69–70. Sābūr 90 A.H. 2.86, 2.96 gr. Walker 413.
71–72. Sābūr 94 A.H. 2.83, 2.87 gr. Walker 419.
73. Sābūr 95 A.H. 2.92 gr. Walker 420, but no points on obverse.
74. Sābūr 97 A.H. 2.74 gr. Walker 422. Die flaws on obverse and reverse.
75. Sābūr 98 A.H. 2.94 gr. Walker 423–424.
76. Sarakhs 96 A.H. 2.84 gr. This date was to have been expected, and completes a series, 90–97 A.H., for this mint. Unpublished. (PLATE XLVI).

[4] I am indebted to G. C. Miles for this note on the mint name Māsabadhān.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Obv.: As usual, but بسرخس فى سنة ست وتسعين No central point or other points.

Rev.: Central point midway below and touching both the *d* of *al-ṣamad* and the *l* of *lam*. The final portion of the marginal legend ولوكره المشركون is misspelled ولوكر المشركن the omission of the *waw* of *mushrikūn* rather unclear due to wear at that spot.

77. Sijistān 91 A.H. 2.94 gr. Walker 426, with similar epigraphic peculiarities, particularly in the name Muḥammad; no obverse central point; horizontal dash in place of reverse central point, above *w* of *wa-lam yakun*. (PLATE XLVI).

78. Sijistān 93 A.H. 2.91 gr. Walker, p. 160, P.86. Note the unusual calligraphy. (PLATE XLVI).

79. Sijistān 98 A.H. 2.90 gr. Walker, p. 160, P.88, but pellet below *w* of *kufu'an* and reverse die replete with flaws. (PLATE XLVI).

80. Sūq al-Ahwāz 91 A.H. 2.89 gr. Walker 440.

81. Sūq al-Ahwāz 93 A.H. 2.92 gr. Walker 441.

82. Sūq al-Ahwāz 94 A.H. 2.93 gr. Walker 442–443.

83. Surraq 93 A.H. 2.95 gr. Walker 431.

84. Surraq 97 A.H. 2.80 gr. Unpublished. (PLATE XLVI).

Obv.: As usual, but بسرق فى سنة سبع وتسعين No central point.

Rev.: Central point midway below *d* of *al-ṣamad* and *l* of *lam*. No other distinguishing marks.

85. al-Sūs 90 A.H. 2.89 gr. Walker 436.

86–87. Wāsiṭ 86 A.H. 2.91, 2.90 gr. Walker 528.

88–89. Wāsiṭ 87 A.H. 2.83, 2.56 gr. Walker 529.

90–91. Wāsiṭ 89 A.H. 2.57, 2.71 gr. Walker 531.

92–93. Wāsīṭ 90 A.H. 2.94, 2.87 gr. Walker 532.

94–96. Wāsiṭ 91 A.H. 2.88, 2.91, 2.92 gr. Walker 533–534.

97. Wāsiṭ 92 A.H. 2.90 gr. Walker 535.

98–101. Wāsiṭ 93 A.H. 2.92, 2.91, 2.97, 2.93 gr. Walker 536–537.

102–108. Wāsiṭ 94 A.H. 2.96, 2.98, 2.85, 2.61, 2.87, 2.99, 2.92 gr. Walker 538.

109–115. Wāsiṭ 95 A.H. 2.89, 2.94, 2.92, 2.90, 2.89, 2.92, 2.85 gr. Walker 539–540 (no. 112 has a point on obverse above *ḥ* of *waḥdahu*).

116–119. Wāsiṭ 96 A.H. 2.83, 2.89, 2.77, 2.89 gr. Walker 541–542.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

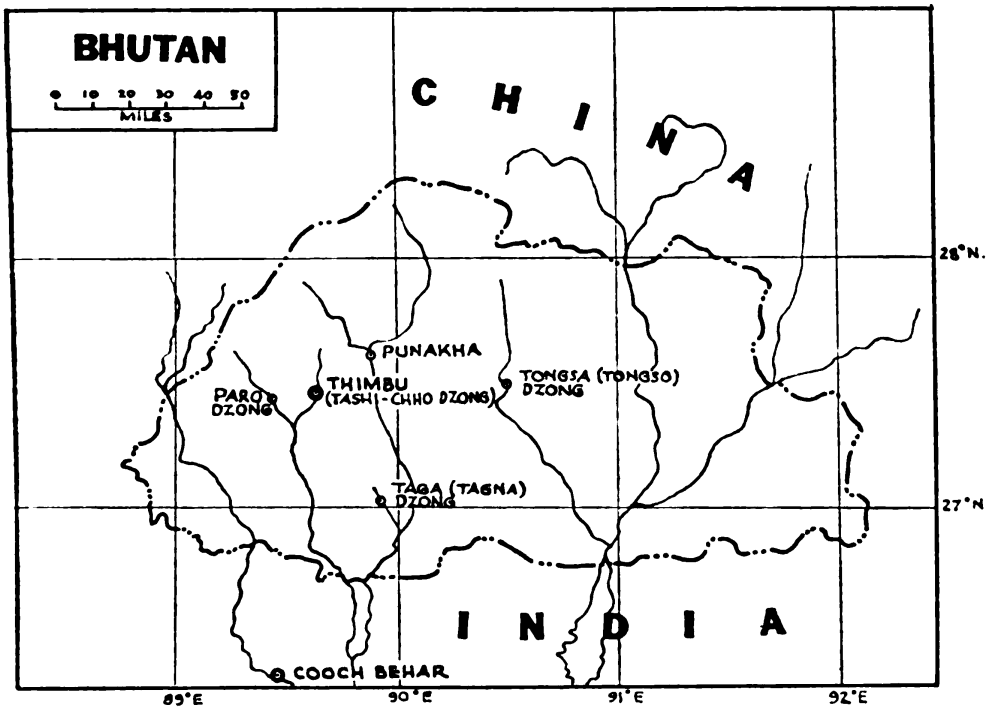
120–124. Wāsiṭ 97 A.H. 2.90, 2.98, 2.90, 2.90, 2.95 gr. Walker 543.
125–126. Wāsiṭ 98 A.H. 2.93, 2.89 gr. Walker, p. 194, P.112.
127. Wāsiṭ 104 A.H. 2.95 gr. Walker 550.
128–129. Wāsiṭ 105 A.H. 2.97, 2.93 gr. Walker 551 (obverse annulets: oo oo oo, but without dots beneath *ṭ* of *Wasiṭ*.
130. Wāsiṭ 108 A.H. 2.99 gr. Walker 556.
131. Wāsiṭ 111 A.H. 2.94 gr. Walker 559.

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from UNIVERSITY OF MICHIGAN

EARLY COINAGE OF BHUTAN

(PLATES XLVII–XLVIII) CHARLES K. PANISH

Bhutan is a semi-independant kingdom in the eastern Himalyas, bordered on the north by the Tibetan plateau and on the south by the Assam-Bengal plains of northeast India.



Originally the area was settled largely by emigrants from the former Indian State of Cooch Behar (Kuch Behar) but in the 14th and 15th centuries many Tibetans moved into the country and assumed control of its affairs. As a result Buddhism became the prevailing religion, and strong cultural and economic ties were established with Tibet. The Bhutanese call their country *Drukyul* (meaning literally "Dragon Country"). Their language, Denjong-ka (pronounced *Dzongkha*) is a Tibetan dialect and is written in Tibetan script.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In the early 17th century a travelling Tibetan lama named Shepton La-pha became king of Bhutan with the title Dharma Raja. He was considered to be a reincarnation of the Buddha, and as such he exercised supreme spiritual and temporal authority over the affairs of the country. Subsequently this supreme power was shared by a temporal leader titled Deb Raja, who in theory was elected by a council of feudal chiefs. In the year 1906, when the then reigning Dharma Raja died, a successor who qualified as a reincarnation of the Buddha could not be found. The Deb Raja thereupon assumed the combined duties of office. In 1907 the office of Dharma Raja was formally abolished; and the most powerful *penlop* (provincial governor) was elected hereditary *gyalpo* (king). The first incumbent, Ugyen Wangchuck (1907–1926) was succeeded by his son, Jigme Wangchuck (1926–1952). His grandson, the third and current king, Jigme Dorji Wangchuck, acceded to the throne on October 27, 1952. His present capital is at Thimbu.

In January 1910, the Punakha treaty was signed whereby Bhutan agreed to be guided by Great Britain in its foreign policy decisions. In return, Britain agreed not to interfere in Bhutan's internal affairs. On August 5, 1949, India entered into a similar treaty as successor to the British interest in south Asia.

Bhutan has always been an agricultural country with an economy based largely on barter. However, from the late 16th century until the third quarter of the 18th, a favorable balance of trade with the Indian State of Cooch Behar caused a sensible flow of that country's coinage into the Bhutanese economy. These coins, of somewhat less than half-rupee size, were called "narayani" after the Narayana dynasty of Cooch Bahar which issued them. Turner, who visited Bhutan in 1783, had this to say: "The narrainee is a base silver coin, struck in Cooch Behar, of the value of about ten pence, or one third of a Sicca rupee. The commodiousness of this small piece, the profits the people of Bhutan derive from their commerce with Cooch Behar, and some local prejudices against the establishment of a mint, have given the narrainee in these regions, as well as in those where it is struck, a common currency, though both countries are independent of each other, and totally different in their language and their manner."[1]

[1] Samuel Turner, *An Account of an Embassy to the Court of the Teshoo Lama in Tibet* (London, 1806), p. 143.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Since these Cooch Behar coins initially circulated in Bhutan, and indeed later became the prototype for the first indigenous Bhutanese issue, it might be well to describe them.

Tradition assigns the first Cooch Behar issue to King Visva Simha, ca. A.D. 1497.[2] However, the standard catalogue by A. W. Botham[3] begins with a silver rupee issued by Nara Narayana (A.D. 1555-1587). This coin is inscribed in old Bengali script with the king's nmae and accession date on one side, and with an invocation to Siva on the other. All subsequent Cooch Behar issues followed this pattern until A.D. 1845 when the mint was finally closed.

Nara Narayana's successor, Lakshmi Narayana (A.D. 1587–1622), also issued silver rupees until 1596 when he declared himself a vassal of the Moghul Emperor of India. Thereafter only half-rupees were issued by Cooch Behar, except for a brief period during the reign of Prana Narayana (A.D. 1633–1666) when full rupees were again struck in a short-lived bid for independence. These half-rupees (which Turner referred to as one-third rupees) were hand struck during the period from A.D. 1587 to 1773 on planchets 17 to 20 mm. in diameter using dies of rupee size, 29 to 31 mm. in diameter, so that the inscriptions on the coins are always fragmentary and the attributions not always assured. Bhattacharayya,[4] quoting Ghosal's *History of Cooch Behar* states that these coins "may be ascribed to the different rulers on the basis of certain signs and symbols peculiar to each of them." Unhappily the coins themselves do not support this statement as will be seen from the following table of Cooch Behar coins:

Coin No.	*Ruler*	*Regnal Dates*	*Symbol No. (Fig. 1)*	*Diameter (mm.)*	*Weight (gr.)*
1	Lakshmi Narayana	1587–1622	none	29.0	9.8
2	Prana Narayana	1633–1666	1	20.0	4.8
3	Mada Narayana	1666–1681	1	19.4	4.7
4	Rupa Narayana	1695–1715	1	19.4	4.8
5	Upendra Narayana	1715–1764	1	19.3	4.7

[2] P. K. Bhattacharayya, "Some Coins of Cooch Behar" *JNSI* 30 (1968) p. 169.
[3] A. W. Botham, *Catalogue of the Provincial Coin Cabinet, Assam* (Allahabad, 1930), pp. 524ff.
[4] Bhattacharayya, *JNSI* 1968, p. 173.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Coin No.	*Ruler*	*Regnal Dates*	*Symbol No. (Fig. 1)*	*Diameter (mm.)*	*Weight (gr.)*
6	Devendra Narayana	1764–1766	1	19.4	4.7
7	Dhairyendra Narayana	1766–1771	1	17.8	4.7
8	Rajendra Narayana	1771–1773	2	19.4	4.6
9	Harendra Narayana	1783–1839	1	19.8	4.7
10	Sivendra Narayana	1839–1847	none	20.5	4.6

TABLE I. Narayani Coins of Cooch Behar — 1587 to 1845 (PLATE XLVII).

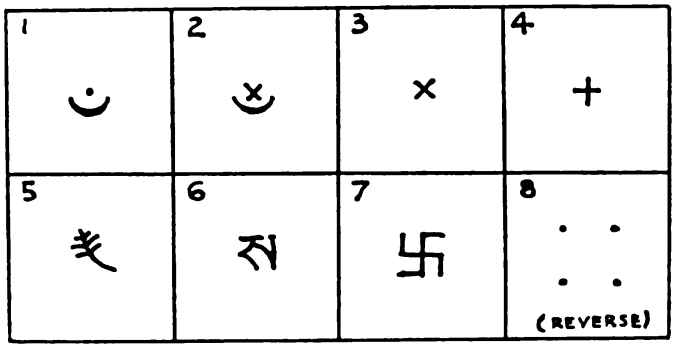


FIG. 1. Symbols on the Coins.

Of the above coins no. 1, of full "rupee" size, is included to illustrate the complete legend on the die.[5] The same ruler issued "half-rupee" coins; and all others listed above are of this denomination. According to Prinsep[6] the narayani coins were composed of silver about .800 fine. Coins 2 thru 6 circulated in Bhutan and all coins listed, 1 thru 10, were used in Bhutan as a source of silver for recoinage.

It would appear that Cooch Behar issued no coins during the period from about 1773 to 1825. This undoubtedly resulted from the fact that on April 5, 1773, Raja Darendra Narayana (1773–1776) entered into a "treaty of subsidiary alliance" with the Bengal Council of the British East India Company, under the provisions of which Cooch Behar surrendered the right to issue its own coinage. However about 1825 Raja Harendra Narayana prevailed upon the Company to relax its stand on this issue and narayani coins were

[5] Obverse: "*Sri srima/l Lakshmi Naraya/nasya saka* / 1509"
(Twice illustrious Lakshmi Narayana. Saka 1509).
Reverse: "*Sri sri/Siva charana* / *kamala madhu* / *karasya*"
(The bee from the lotus at the foot of the twice illustrious Siva).

[6] James Prinsep, *Useful Tables* (London, 1834), p. 46.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

again minted for circulation. The last Cooch Behar coin issued for circulation, prior to the final closing of the mint in 1845, was coin no. 10. Subsequent machine-struck issues of this State were produced in limited quantities at Company mints in Bengal solely for prestige and gift purposes.

The first coinage struck within Bhutan itself is reputed to have occurred as a result of an event which took place in 1772. In that year, the Deb Raja of Bhutan, acting in concert with the *Dorpo Deo* (hereditary prime minister) of Cooch Behar, invaded the latter country and kidnapped its raja, Dhairyendra Narayana.

Of this event, Kishant Kant Bose, who visited Bhutan in 1815, wrote: "There was formerly no mint in Bootan, but when the Booteahs carried off the late Raja of Cooch Behar, they got hold of the dies with which they still stamp Narrainee Rupees. Every new Deb Raja puts a mark upon the Rupees of his coinage, and alters the weight. The Dhurma Raja also coins Rupees, and besides them, no one else is permitted to put their mark upon the Rupees, but there are mints at Paro, Tongso, and Tagna."[7]

This state of affairs was confirmed by Captain R. Boileau Pemberton who journeyed to Bhutan in 1837 on behalf of the British East India Company, and who wrote that the coin then circulating in Bhutan was the silver Deb rupee "nominally of the value of the Company's half Rupee" minted at Punakha and Tashi-chho (Thimbu) and in the "castles of the Subahs" (i.e. district headquarters or *dzongs* of which there are presently fifteen in number).[8] Pemberton further states that the Deb rupees were made from narayani coins which were collected in the plains of Cooch Behar and carried to Bhutan where the metal was debased and recoined as the Deb rupee, often at a reduced weight.

Thus, while tradition would have the Bhutanese striking their first coinage from the dies of Dhairyendra taken from Cooch Behar during the invasion of 1772, in actual fact no such recognizable issue is extant. Nor does Turner, who visited Bhutan in 1783, mention such a coinage. Actually, the sequence of available specimens can be

[7] *Political Missions to Bootan*, issued by the *Bengal Secretariat Office* (Calcutta, 1865), p. 203.
[8] R. B. Pemberton, *Report on Bootan* (Calcutta, 1838), p. 62.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

postulated reasonably from the methods used to debase the coinage. This debasement followed a sequence generally as given below:

a. Period I (ca. 1785–1810): The weight of the coin was reduced from about 4.6 to 4.0 grams without alteration of its general appearance or its silver fineness. It is possible that this change may have been effected, at least in part, by clipping. No special Bhutanese symbols are observed on these coins.
b. Period II (ca. 1810–1850): The Cooch Behar coins were melted and alloyed with lead. Deb rupees were then coined at close to the normal weight of 4.6 grams. Most coins of this period are in high relief, and most appear to have been cast rather than die-struck.
c. Period III (ca. 1850–1875): Coins are as in Period II, but copper was used as the alloy in place of lead, and coin weight and fineness were further reduced.
d. Period IV (ca. 1875–1930): These coins were made entirely of copper or brass, and the coin weights further reduced to as little as 1.0 gram. The coins of this period were die-struck.

The start of Period I, based upon the evidence of the coins themselves, appears to coincide with issuance of the Harendra Narayana coinage (coin no. 9), the earliest Cooch Behar issue which shows evidence of having been tampered with. An analysis of the weights of twelve of these coins separates them into two groups, one with a weight range of 4.61 to 4.72 grams (average 4.66 grams), and the other with a range between 2.47 and 4.37 grams (average 4.08 grams). The first group is presumed to be made up of regular Cooch Behar issues; the second group to be made up of Bhutanese copies of Period I. The latter coins are die-struck and in low relief like their prototype, but are slightly smaller in diameter, and seldom show more than a non-commital portion of the ruler's name: "..rndra Nara..". On some of the Bhutanese copies this fragment is misspelled: ".. *r*andra Nara.." using a broad vowel.

With the passage of time the Deb rupees' inscriptions become less and less legible, until by the end of Period IV they are quite unreadable. The date when the Deb rupee ceased to be made is conjectural. Following the Punakha treaty of 1910, Bhutan became economically oriented toward British India; and by the end of the

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

first quarter of the 20th century Indian coins had virtually displaced the Deb rupee in the population centers. By this time the Deb rupee had become a nondescript copper or brass coin of less than an Indian half-pice in value. In 1928 Bhutan initiated plans for a reformed national currency which was tied to the Indian rupee. The first issue of this coinage was in 1929 when 20,000 *gyatam* or silver half-rupees were minted at Calcutta for Bhutan. These weighed 5.83 grams and were .917 fine, matching exactly the Indian half-rupee. These coins were dated in the Tibetan clendar "earth-dragon year" corresponding to A.D. 1928. The next year 30,000 more of these coins were issued without a change in date. In 1931 a second denomination appeared. This was the *zangtong* or copper pice, of which 10,000 were minted at Calcutta. These pice also were dated in the "earth-dragon year." They were rated at 64 to the rupee. With the introduction of this national coinage, the Deb rupee legally passed from the scene.

Table II contains a representative list of Deb rupees. All appear to be copies of the Cooch Behar issues of Harendra Narayana.

Coin No.	*Metal*	*Diameter (mm.)*	*Weight (gr.)*	*Symbol (Fig. 1)*	*Remarks*
11	Æ (.800 fine)	18.4	4.0	1	Period I. Similar to coin no. 9.
12	Æ (.600 fine)	19.9	4.7	6, 1	Period II. High relief.
13	Æ (.500 fine)	19.7	4.6	6, 1	Period II. Symbol 6 relocated.
14	Æ (.400 fine)	20.0	4.5	5, 2	Period III. High relief.
15	Æ (.300 fine)	19.0	4.6	2	
16	Æ (bronze)	21.4	4.2	6, 1	Period IV. High relief.
17	Æ (bronze)	19.7	3.9	2	
18	Æ (copper)	19.4	4.0	7, 1	Period IV. Low relief.
19	Æ (brass)	18.5	3.4	8, 1	
20	Æ (copper)	18.2	2.8	3, 1	
21	Æ (brass)	17.4	2.8	1, 2	
22	Æ (copper)	18.0	2.4	4, 1, 10	
23	Æ (brass)	16.0	1.9	1, 6	
24	Æ (brass)	17.0	1.2	3, 1, 10	

TABLE II. Deb "Rupees" of Bhutan — ca. 1785 to 1930 (PLATE XLVIII).

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Undoubtedly other symbols will come to light. No information is available as to the number of Deb rupees struck, or as to which symbol designates which mint. However a modern Bhutanese pice minted in 1951 and 1955 at the Alipore (Calcutta) mint is inscribed with symbol no. 6.[9] This is the Tibetan letter "sa" which means "earth." Since this coin was issued by the Wangchuck regime, symbol no. 6 must be presumed to be the mark of that family. Inasmuch as prior to 1907 the Wangchucks were the *penlops* of Tongsa, it may further be presumed that coins nos. 12, 13, 16 and 23 were minted at Tongsa Dzong. These coins were wrongly attributed by Valentine to Cooch Behar.[10] There is no basis for presuming other mints; but should data become available on the provenance of coin hoards, a meaningful correlation might then be made between symbols and mint localities.

[9] R. S. Yeoman, *A Catalogue of Modern World Coins, 1850–1964* (Racine, 1970), p. 46, coin no. 3.
[10] W. H. Valentine, *The Copper Coins of India*, I (London, 1914), p. 76.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

THE HERMOSILLO PESO OF 1839

(PLATE XLIX)

THEODORE V. BUTTREY, JR.

The Norweb collection has recently acquired an unusual Mexican peso which ought properly to be subjected to the closest scrutiny. It is an Hermosillo 8-reales of 1839, of standard types and legends but dated to a period when the mint was supposed not even to exist. The issue was published and illustrated by an outline sketch in 1886,[1] but was not included in subsequent catalogues nor in the studies of the Hermosillo mint by Dr. A. F. Pradeau.[2]

It had long been known that copper cuartillas, or quarter-reales, had been struck in Hermosillo from 1832 to 1836 on behalf of the State of Sonora.[3] Thereafter, it was thought, the mint did not function until 1861, and only then did it produce a proper gold and silver coinage, of Federal types. This picture was enlarged in 1953 when the auction sale of the Knowles collection produced a thitherto unknown Hermosillo peso, of good weight but idiosyncratic style, dated 1836 (PLATE XLIX, 2).[4] There was no doubt that the piece was genuine, and indeed a second specimen, dated 1835, was subsequently noted as having been seen and published by J. L. Riddell.[5]

Unexpected as the 1835 and 1836 pesos were, their striking was confirmed by the contemporary documentation.[6] The original issue, struck only between November 1835 and the end of January 1836,

[1] A. M. Smith, *Encyclopaedia of Gold and Silver Coins of the World* (Philadelphia, 1886), p. 59, pl. IX[2], 3. I owe the reference to Dr. A. F. Pradeau.

[2] *The Mexican Mints of Alamos and Hermosillo, ANSNNM* 63 (New York, 1934); *Sonora y sus casas de moneda* (México, 1959); *Historia numismática de México de 1823 a 1950*, Vol. 2 (México, 1960).

[3] The dates 1832 to 1838 inclusive are given in my *Guidebook of Mexican Coins* (Racine, 1969), p. 48, but it has been argued that the examples dated 1837 and 1838 are counterfeit, and they need restudy.

[4] A. F. Pradeau, "The Mexican Mint of Hermosillo," *Numismatist*, Aug. 1953, pp. 804–806.

[5] *Monograph of the Silver Dollar* (New Orleans, 1845; reprinted, México, 1969), no. 182. Cf. Pradeau, "The Mexican Mint of Hermosillo: Additional Data," *Numismatist*, Nov. 1953, pp. 1155f.

[6] Pradeau, *Historia numismática*, Vol. 2, pp. 37–42, 148–152, 165–172.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

must have been very small. The issue was suspended and the mint closed when Federal officials complained that the dies, although of Federal types, had been manufactured from locally produced matrices, contrary to law.

No documentation supports a coining of pesos in 1839; on the contrary, we have a specific, official statement of 1849 to the effect that the mint had been abandoned in 1836 and never reopened, so that "[in 1849] you could hardly locate any piece of the machinery, while the building is deteriorated to the point of becoming a ruin."[7] Nothing could be more explicit, yet we have now the coin of 1839, as well as a bit of secondary testimony. The French diplomat Duflot de Mofras, who travelled in Mexico and California, included in a brief survey of the Mexican mints of his time the information that the Hermosillo mint, "established in 1838, struck only 70,000 pesos with a high gold content; but the furnaces and the press being broken [or worn out], coinage was abandoned for several years."[8] Duflot further remarks on the amount of gold and silver submitted to the assay office of Hermosillo in 1839, which suggests first-hand information gained on the spot, and supports his asseveration about the mint.[9]

Furthermore the document of 1849, if not actually lacking in candor, is misleading at least in stating that the mint ceased to operate in 1836. That some coining facilities were still available the following year is indicated by the order of July 23, 1837, which provided for the devaluation of the Sonoran bronze and its counter-

[7] Note of October 31, 1849, from the office of the Governor of Sonora to the Federal Ministerio de Relaciones interiores y exteriores, cited in Pradeau, *Historia numismática*, Vol. 2, p. 169.

[8] Eugène Duflot de Mofras, *Exploration du Territoire de l'Orégon, des Californies et de la Mer Vermeille, exécutée pendant les années 1840, 1841 et 1842* (Paris, 1844), Vol. 1, p. 41: "établi en 1838, ne frappa que soixante-dix mille piastres qui contiennent beaucoup d'or; mais les fourneaux et le balancier s'étant brisés, le monnayage fut abandonné pendant plusieurs années." It is not clear why Duflot uses the phrase "plusieurs années," for he visited Hermosillo in 1840 or early 1841, but not later (Duflot de Mofras, *Travels on the Pacific Coast*, trans. by Marguerite E. Wilbur [Santa Ana, California, 1937], pp. xx, xxvi–vii, xxx). Perhaps he intended to adjust this information to 1844, the date of publication of his *Exploration*. (N.B.: the Wilbur translation renders *balancier* in the passage above as "scales," incorrectly [p. 24].)

[9] *Exploration*, Vol. 1, p. 209.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

stamping at the mint—"serán remitidas a la ceca para su marcación."[10] Duflot's remark that the mint was established in 1838 is wrong, but he may have misunderstood a reference to the resumption of silver coinage in that year.

The 1839 peso is of normal Federal types (PLATE XLIX, 1):

Obv.: Eagle facing, head r., holding snake, standing upon *nopal* or cactus, above wreath of oak and laurel. Above, REPUBLICA MEXICANA.

Rev.: Liberty cap inscribed LIBERTAD on burst of rays. Below, 8 R • $\overset{o}{H}$ • 1839 • P • R • 10 D^{s} • 20 G^{s} • (8-reales, mint of Hermisillo, 1839, assayer P. R., 10 dineros 20 granos fine [= 902.7 thousands])

The color and ring are good, and there is no visible evidence of debasement. The weight of 25.26 grams is somewhat short of the standard 27.07. The specific gravity of 10.30 indicates a silver fineness of 890 thousands, on the assumption of a purely bimetallic alloy of silver and copper. The legends have been carefully examined under a 30 power binocular microscope, and show no evidence of alteration in any detail. The piece is weakly struck at the top edge of the obverse, the corresponding bottom edge of the reverse, and in the center of both faces. The die position is, abnormally, ↑↗.

While the types are standard, there are several unusual elements in detail and style. On the obverse, the eagle perches on the central trunk of the nopal, or on a leaf that rises directly from it. The snake which it holds projects an arrowpoint tongue. The wreath, while well cut, is somewhat schematically arranged. To l. the oak leaves alternate in pairs with pairs of acorns, except that the lowest acorn is wanting. To r. the laurel leaves and berries are similarly disposed in alternation, with a single leaf at the uppermost end.[11] On the reverse the rays below the cap, normally splayed so as to continue

[10] Pradeau, *Historia numismática*, Vol. 2, p. 156.

[11] The analogy is, curiously, not the standard Federal 8-reales wreath (for which see below), but the somewhat different wreath of the gold 8-escudos. On the gold both oak and laurel leaves are arranged in pairs, ending with a single leaf, the interstices between paired leaves providing space for the acorns and berries.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

the circle of the burst, here fall straight down and parallel.[12] The Liberty cap shows two creases from the edge at the l., two closer together at the r., and one at the upper r. where the peak of the cap folds over. The inscription LIBERTAD is upright rather than the usual italic.

A comparison of the piece with the 1836 peso reveals certain points of contact, and of difference from the pesos of the other mints.

(1) On both pieces the eagle stands upon what appears to be the trunk of the nopal, contrary to all usage elsewhere, where its claw is always placed on the first leaf to the right of the trunk.

(2) The obverse letter punches were drawn at least in part from the same font, one not generally used elsewhere. Note particularly the shapes of the R with small loop, B with two complete loops, square C with thick upright, flat top A (exaggerated on the 1839 peso), and N with flat base at right.

(3) The form of the wreath is basically the same in both cases. The Hermosillo pesos of 1835 and 1836 did bear branches peculiarly thick and stiff, and ribbed so as to give the impression of twisted rope. But the laurel leaves and berries are set in alternating pairs, precisely as those of the 1839 peso, while the oak leaves and acorns fall in such a pattern on the upper end of the branch.

(4) The Liberty caps of the 1836 and 1839 pesos are cut from the same punch, and bear the same unusual upright, rather than italic LIBERTAD, in letters of the same style, size and spacing. Otherwise, however, the reverses differ, in the form and number of rays, the letter and number punches, and the form of the mintmark.

The similarities between the 1836 and 1839 pesos are persuasive evidence of a common source of inspiration, and even of certain punches. Whatever mint facility produced our coin, it must have had access to implements already used in 1836 to produce a peso which all recognize as genuine. It has however been feared that our 1839 peso could be a modern alteration of a genuine coin, either one of the common issues of 1839 of Guanajuato, Zacatecas, or any other mint; or of an Hermosillo peso of later date, most obviously 1869.

[12] The only analogy to this treatment of the rays is in the Durango pesos of the late 1820's and early 1830's, from which presumably this detail has been copied.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

In the former case both mintmark and assayer's initials would require alteration; in the latter, only the third digit of the date. Two arguments can be made at once against the possibility of alteration. Not only is there no trace whatever of reworking on the coin, but its publication as early as 1886 forbids us to consider it an altered piece designed to deceive collectors. Were there serious collectors of Mexican Republican coinage at such a date? and who could have carried off such a deception without leaving a trace, in the absence of the sophisticated techniques of forgery with which we are favored today?[13]

But these points aside, there is an objective test which we can apply here. If the coin could possibly have been altered, we need to identify the potential original. And that cannot be done. If we consider, not the single letters or numbers of the reverse, but the style of the whole piece, we can find nothing comparable. The easiest detail to check is the obverse wreath.

The first facing eagle 8-reales, struck at México in 1824, included a wreath whose form was to continue at that mint without change until the peso was entirely redesigned in 1898. While different engravers produced slightly different leaf shapes, or altered the relation of the leaves, acorns and berries slightly, the basic shape remained unaltered and is recognizable as what I call the Federal wreath (PLATE XLIX, 3). To left, from the base, the oak branch is formed by: two acorns (of which the upper will normally fall before the rock which supports the nopal), two leaves, acorn-leaf-acorn, two leaves (of which that at l. is higher on the branch), acorn-leaf (the leaf central and covering the branch), two leaves joined at stem. To r., from the base: two berries (of which the upper will normally fall before the rock), leaf-berry-leaf at r. balancing three smaller leaves at l., small leaf at l. at sharper angle, berry-leaf-berry, two leaves, leaf at l., terminal leaf upright.

By 1839 this Federal wreath was regular on pesos of México, Guadalajara, Guanajuato, Tlalpam (in operation 1828–1830), and in

[13] Counterfeit 19th century Mexican pesos exist in abundance. The Republican peso was introduced in 1823, and already by 1844 Riddell was able to list no fewer than 239 varieties of counterfeit. These were made of base silver, two-thirds of Riddell's examples testing 400 thousands fine or less, down to virtually zero. The counterfeits are usually evident at once from their yellowish or brownish color and crude workmanship.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

a slightly altered form at Zacatecas. Chihuahua, far to the north, had devised a very different wreath with short branches which was to be used there until the late 1860's. Durango's pesos, manufactured during 1832–1842 from obverse matrices apparently produced in Paris, were of quite distinct style, and the florid wreath is unlike that of any other mint. Potosí had from the beginning, in 1827, employed a wreath of its own, in which the laurel branch to r. was a fair imitation of the Federal; but the oak branch was distinctively local, and notable in placing the third leaf from the end to the left of the branch rather than covering it. In 1839, then, each Mexican mint was using a definable, and in some cases a unique obverse wreath; and none of these is of the type we find on the 1839 Hermosillo peso—not to mention any other details.[14]

The same situation obtains when we compare the 1839 Hermosillo peso and the 1869 (PLATE XLIX, 4). A study of similar elements on the two issues once again reveals that they are simply too diverse in style to allow the possibility that the one is an alteration of the other. Hermosillo had adopted the Federal wreath on the obverse of the peso after silver coinage resumed in the early 1860's. This obverse runs from 1863 through the decade, including all the examples I have seen of 1868, 1869 and 1870, and continues until the mint closed in 1895. On this score alone an obverse struck in 1869 cannot have produced the obverse of the peso dated 1839. The reverse of the 1839 issue also differs in several ways: the unusual rays below the cap, the upright LIBERTAD, and the small mintmark. The reverse letter punches of 1868, 1869 and 1870 are consistent among themselves, but clearly differ from those of the 1839 peso, notably in the 1 (1839, ball serif, broad base; 1869, short sharp serif and short base), the 9 (1839, pointed tail; 1869, curved tail), the P (1839, squared loop; 1869, round loop), and the O (1839, large; 1869, small). These details merely confirm that the 1839 peso cannot have been produced by the alteration of an 1869 piece. One final bit of evidence, from fabric, is the outer circle of elongated dentils on our coin, character istic of many pesos struck between the late 1820's and the 1840's, but not later.

[14] E.g., the snake's tongue. This detail is normally not shown at all on the peso dies of the 1830's and early 1840's, save at Potosí. The arrow-point seems to be unique.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

The 1839 Hermosillo peso must be accepted as genuine. Its publication as early as 1886 speaks for it. Fabric and color reveal nothing suspicious. It cannot be an alteration of another issue, for there is no coin of this style from which it can have been altered. The peso must be accepted as genuine as it stands, an interesting and unexpected addition to our knowledge of the 19th century Mexican mints, the more welcome in that it falls at a period when the contemporary documentation is so very sparse, and in this case contradictory.[15] A silver mint was operating at Hermosillo in 1839 after all, having some connection with the mint of 1835–1836 as the punches show. The coinage might have been unofficial from the point of view of the Federal government, for the dies in use were still not cut from Federal matrices. But the mint was hardly clandestine, for the mintmark and date are there to be read.

[15] All this is as nothing compared to the inexplicable Federal decree of November 5, 1846, which abrogated the free export of uncoined gold and silver from the ports of Guaymas and Mazatlán, "now that the mint at Hermosillo is functioning." To support this assertion we have no other archival document, no reference in any traveler's report, no coin in any metal—nothing. Cf. Pradeau, *Historia numismática*, Vol. 2, pp. 164f.

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

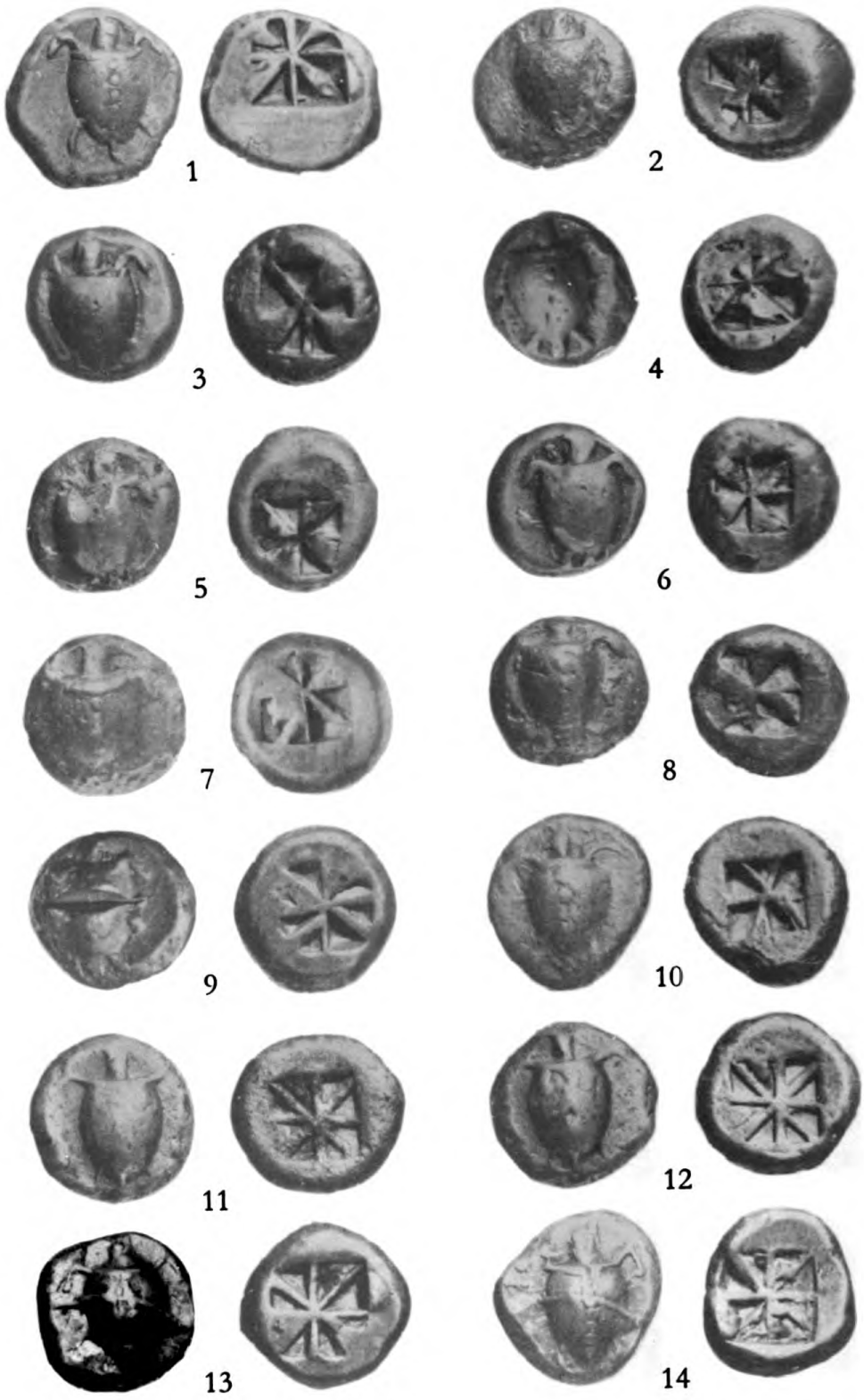
Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Plates

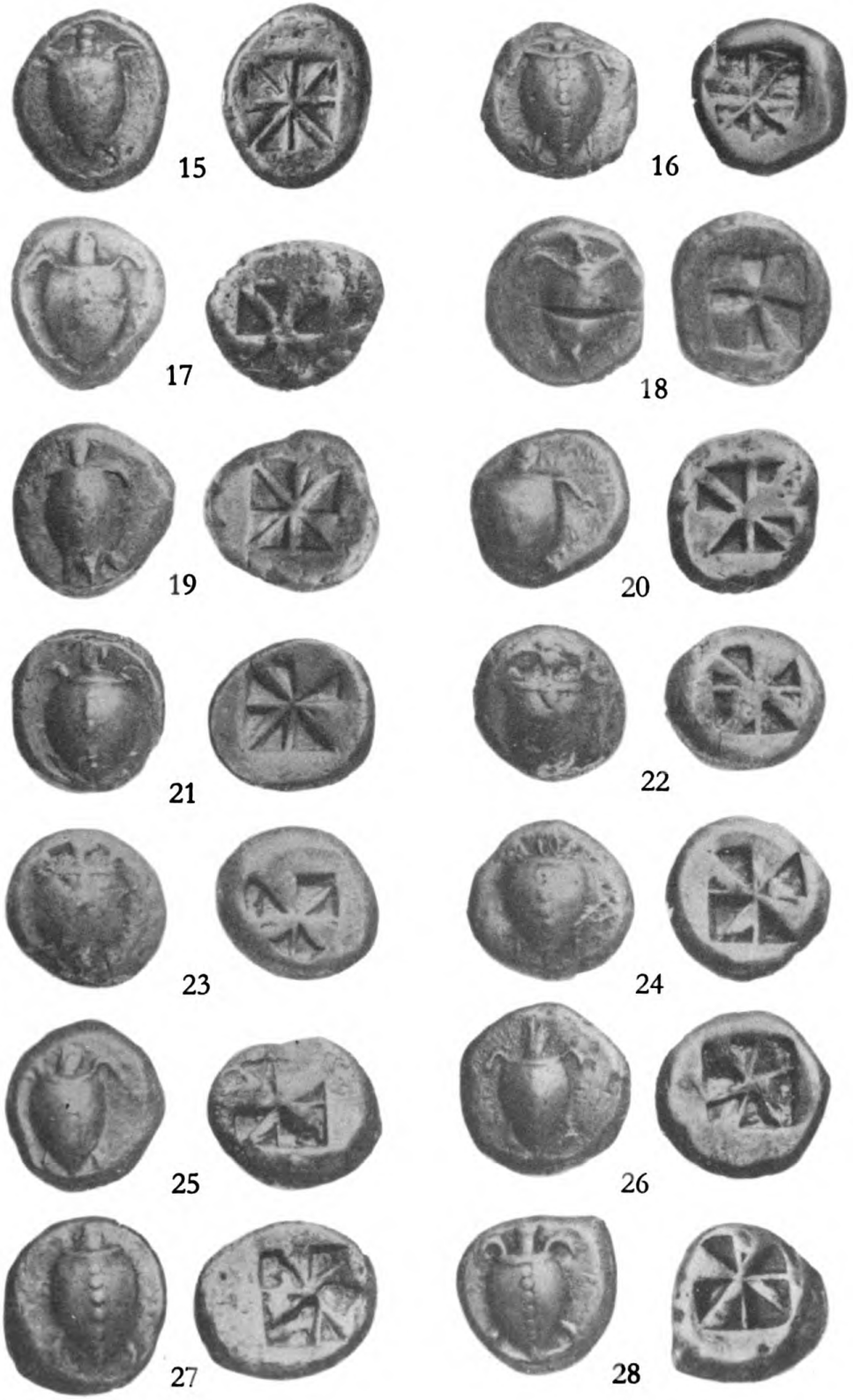
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0
Digitized by Google
Original from
UNIVERSITY OF MICHIGAN

I



EARLY AEGINETAN COINAGE

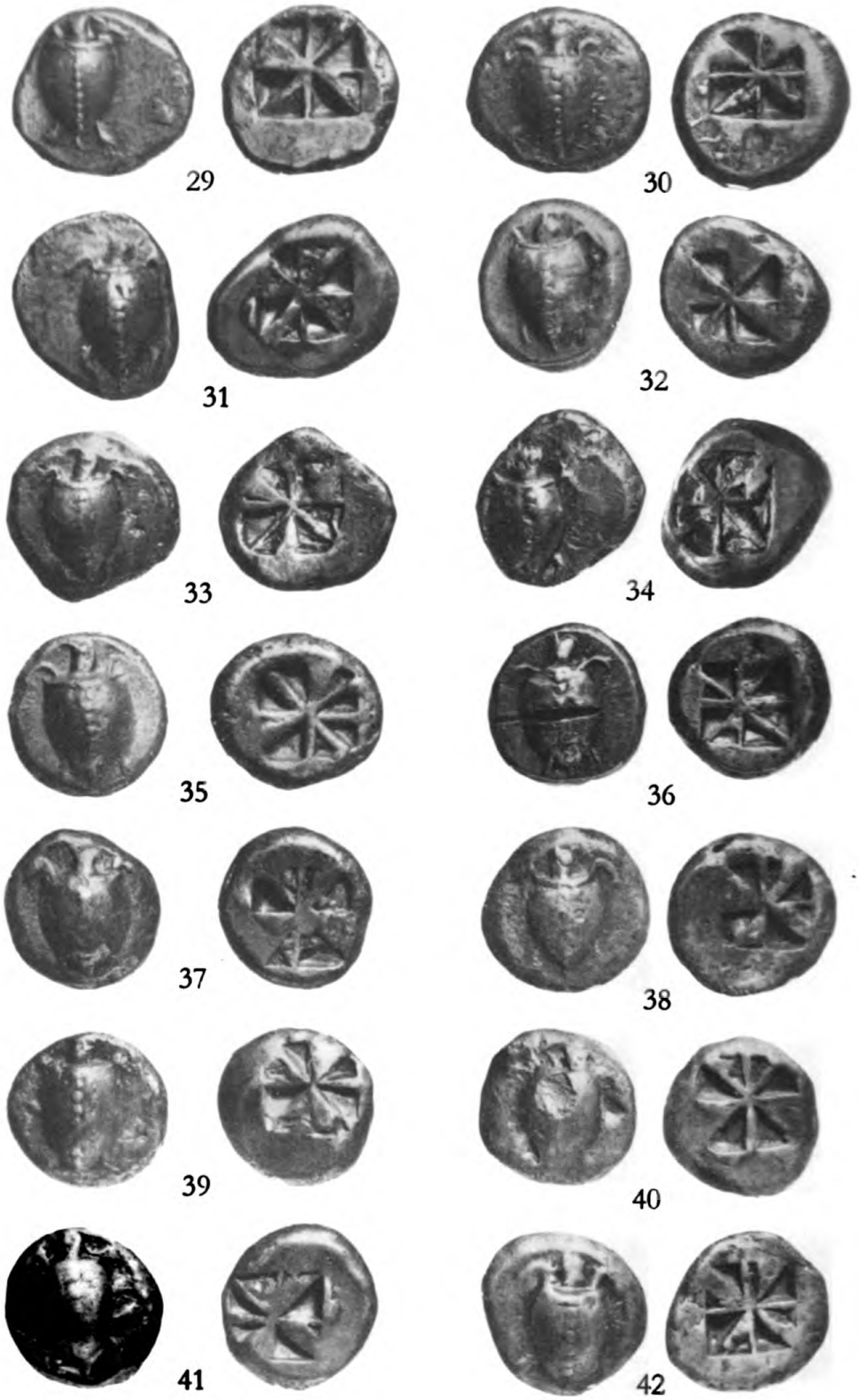
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



EARLY AEGINETAN COINAGE

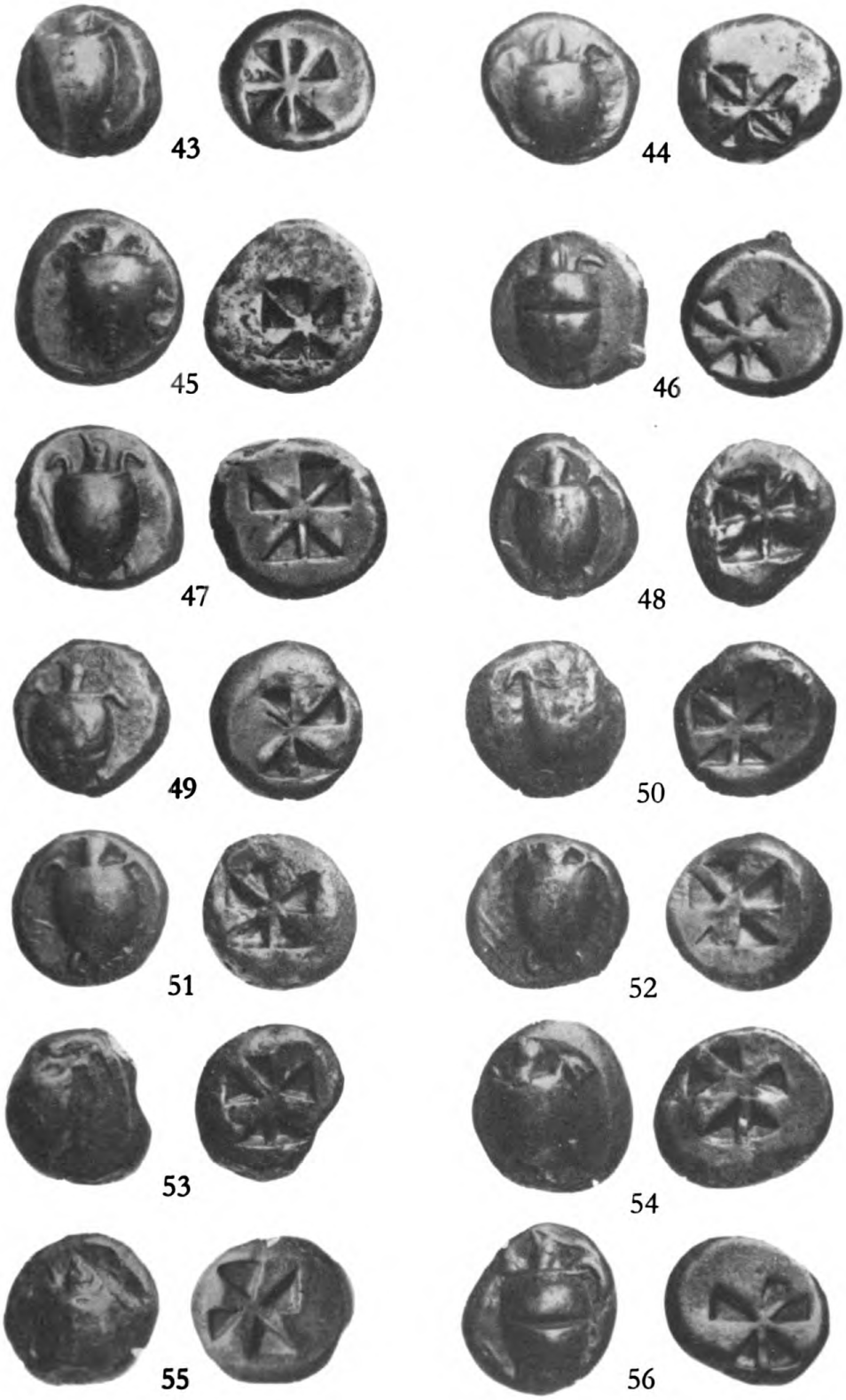
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

III



EARLY AEGINETAN COINAGE

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

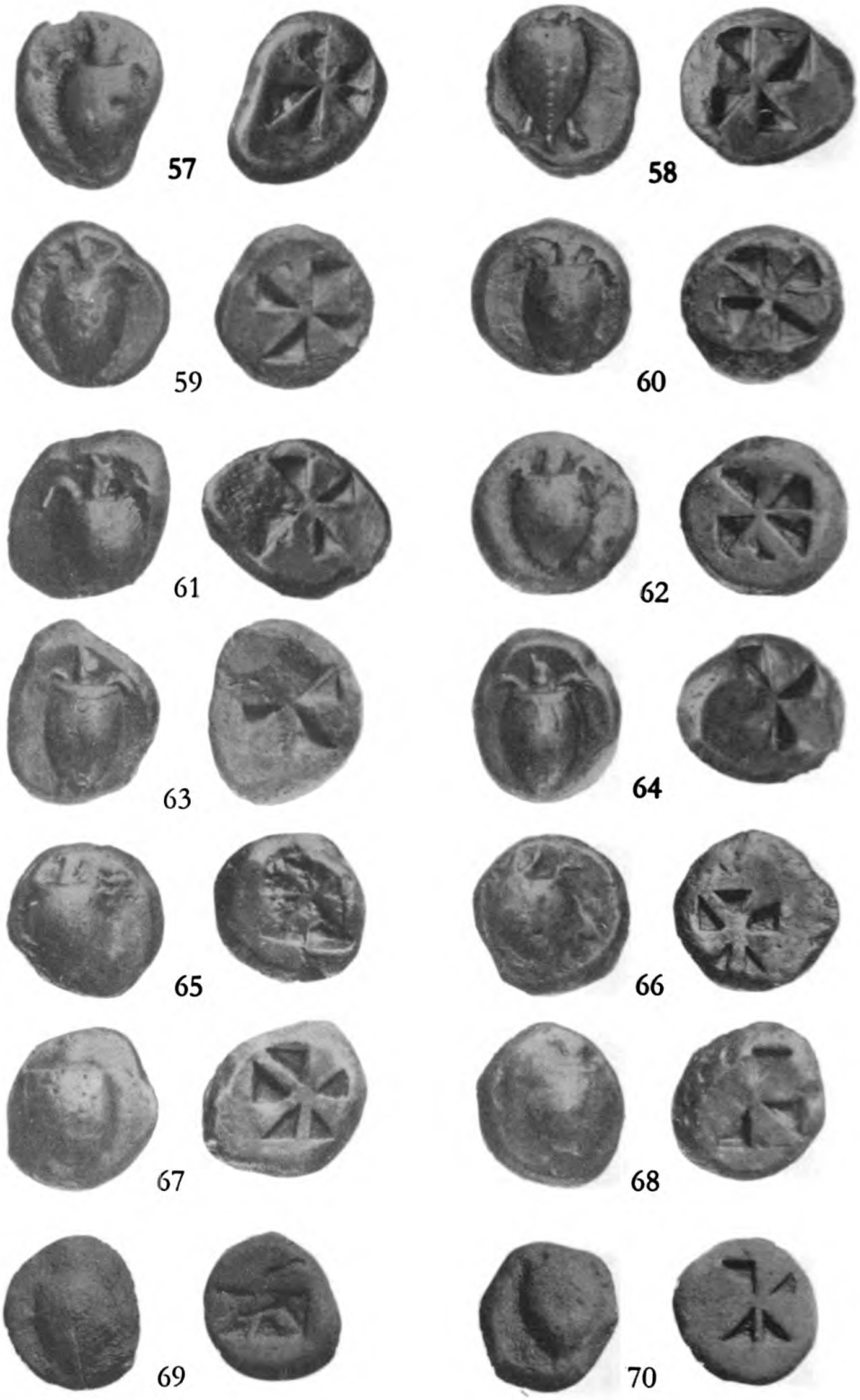


43 44 45 46 47 48 49 50 51 52 53 54 55 56

EARLY AEGINETAN COINAGE

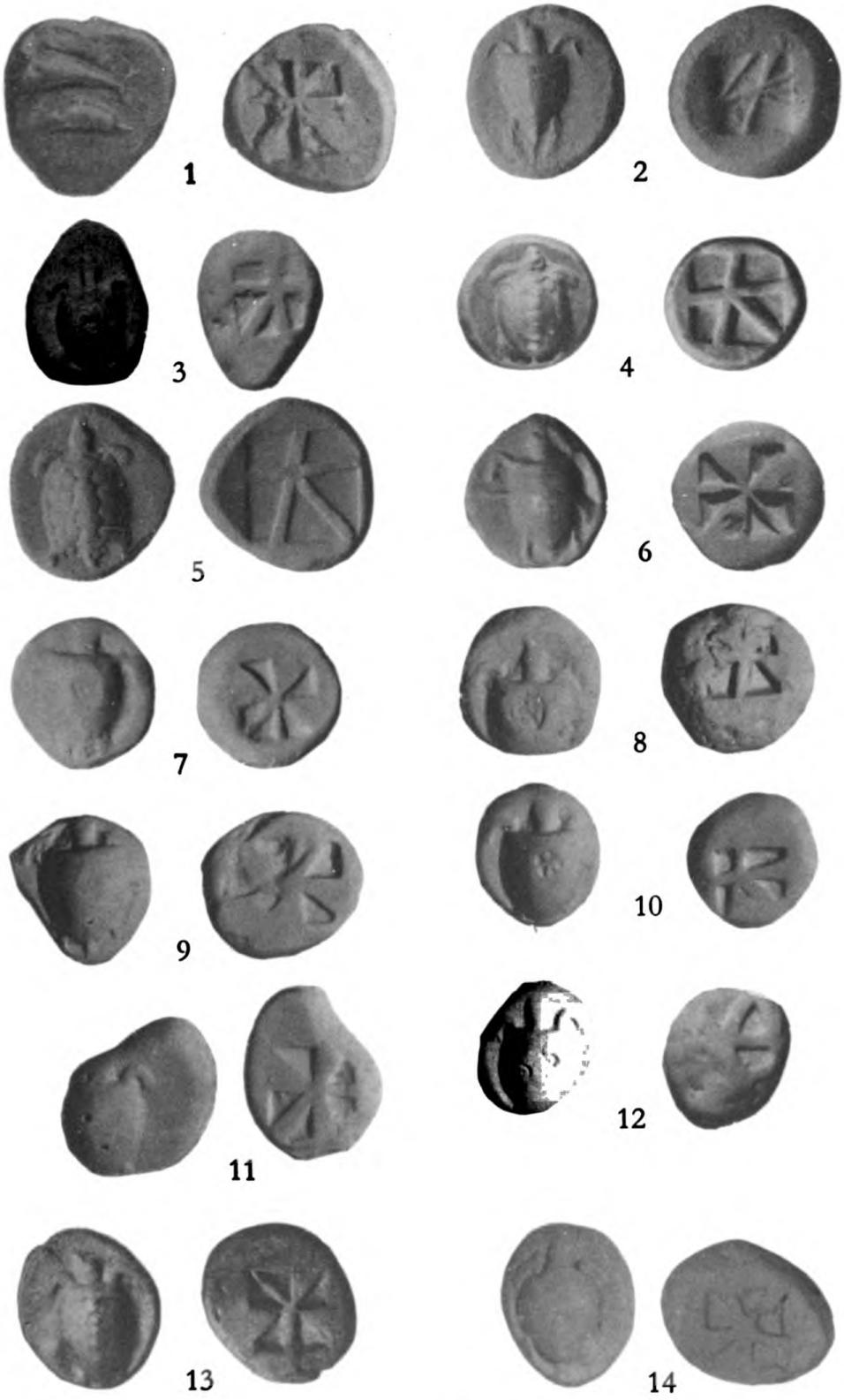
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

V



EARLY AEGINETAN COINAGE

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



EARLY AEGINETAN COINAGE

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

VII


1



2


3


4


5


6


7


8

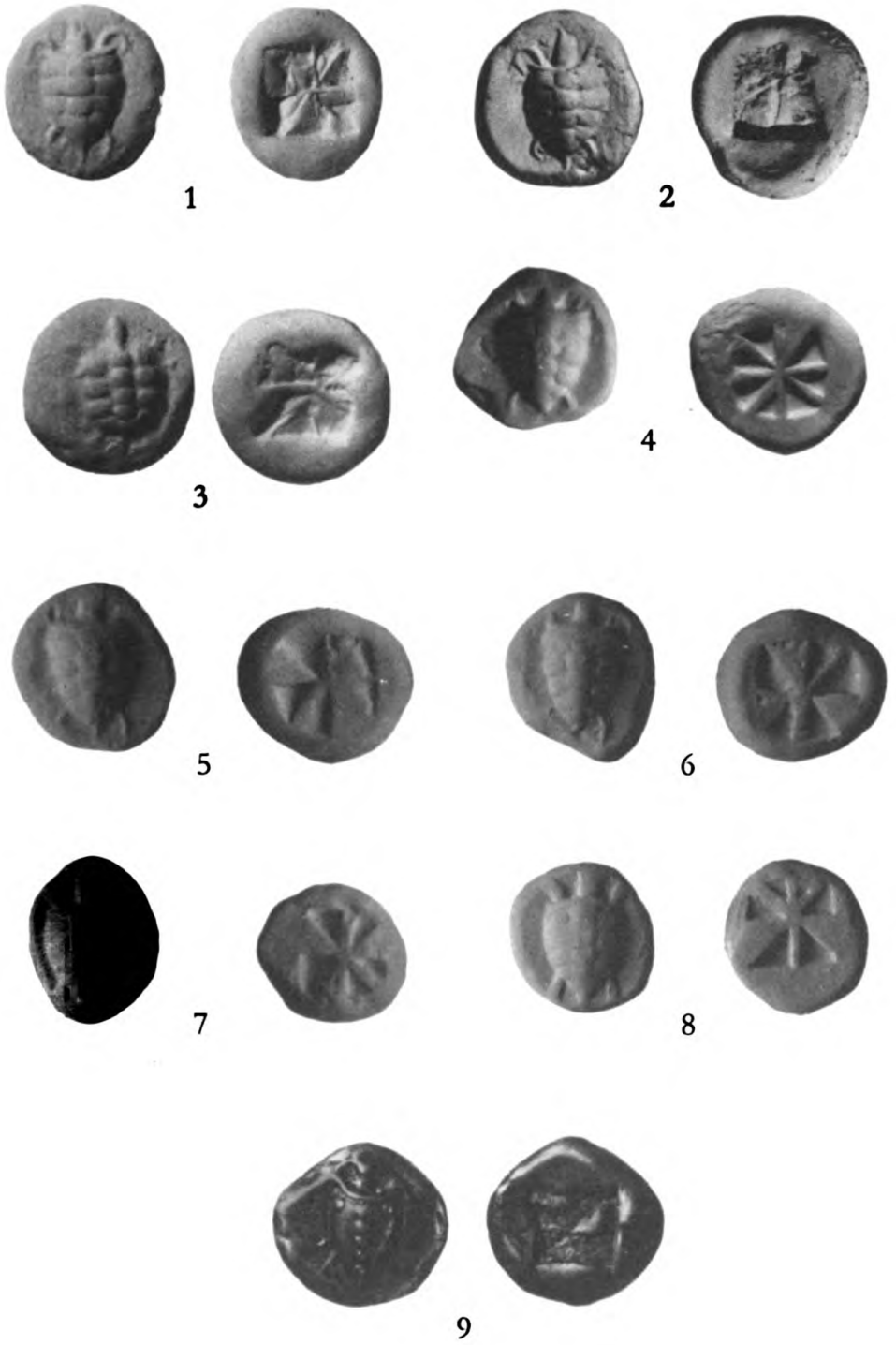

9


10


11

EARLY AEGINETAN COINAGE

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



EARLY AEGINETAN COINAGE

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

IX



1



2







3



4





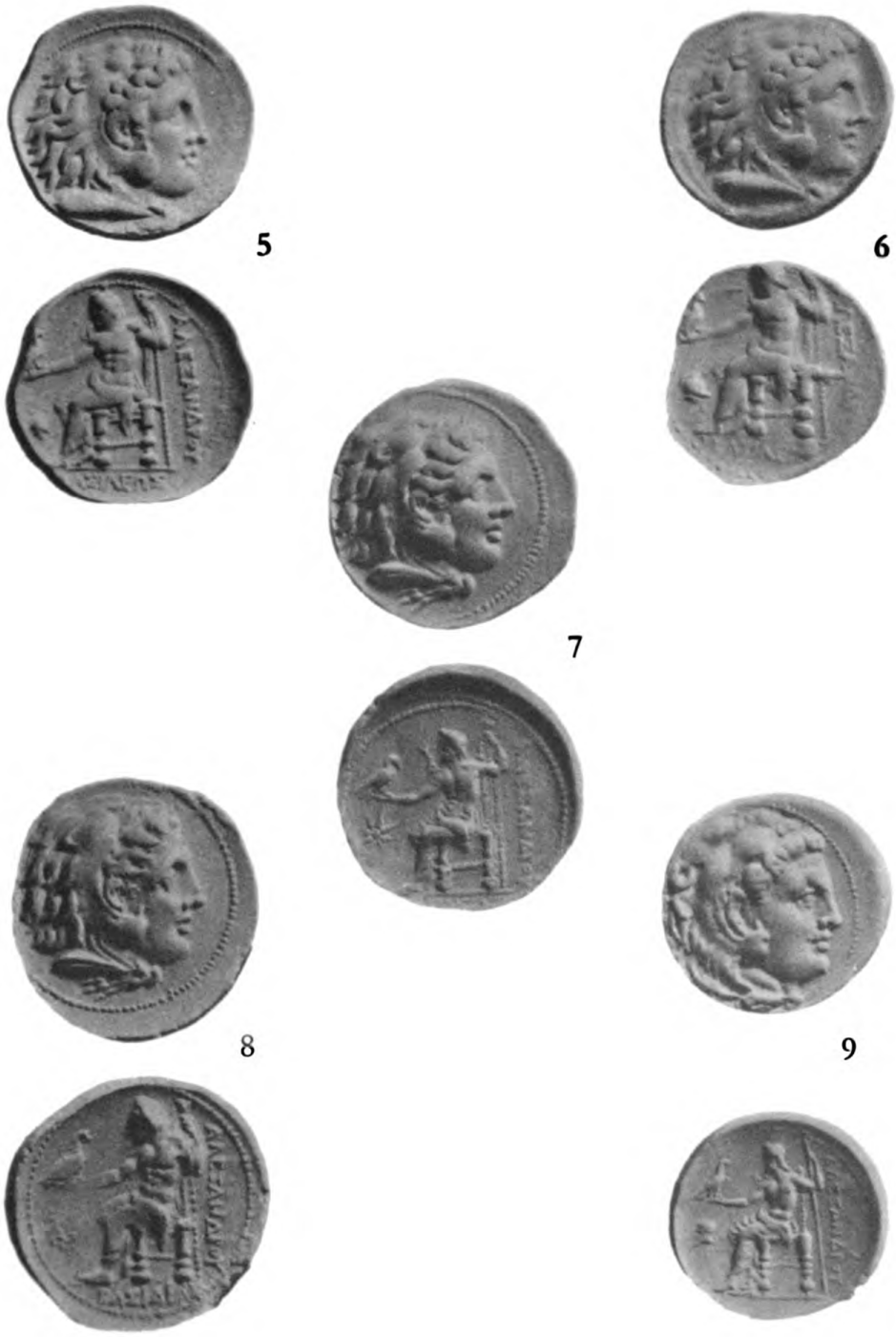
PELOPONNESIAN ALEXANDERS

1962 Peloponnesian Hoard

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PELOPONNESIAN ALEXANDERS

1962 Peloponnesian Hoard

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



A1-P1



A2-P2



A3-P2









A4-P3



A5-P4



A5-P5







PELOPONNESIAN ALEXANDERS

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



A6-P6 A6-P7 A6-P8

A7-P9

A8-P10 A8-P11 A8-P12

PELOPONNESIAN ALEXANDERS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



A8-P13 A8-P14 A9-P15

A10-P16

A10-P17 A10-P18 A10-P19

PELOPONNESIAN ALEXANDERS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



A11-P20 A11-P21 A11-P22



A12-P23



A13-P24 A14-P25 A14-P26

PELOPONNESIAN ALEXANDERS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



A15-P27 A15-P28 A16-P29

A16-P30

A16-P31 A17-P32 A17-P33

PELOPONNESIAN ALEXANDERS

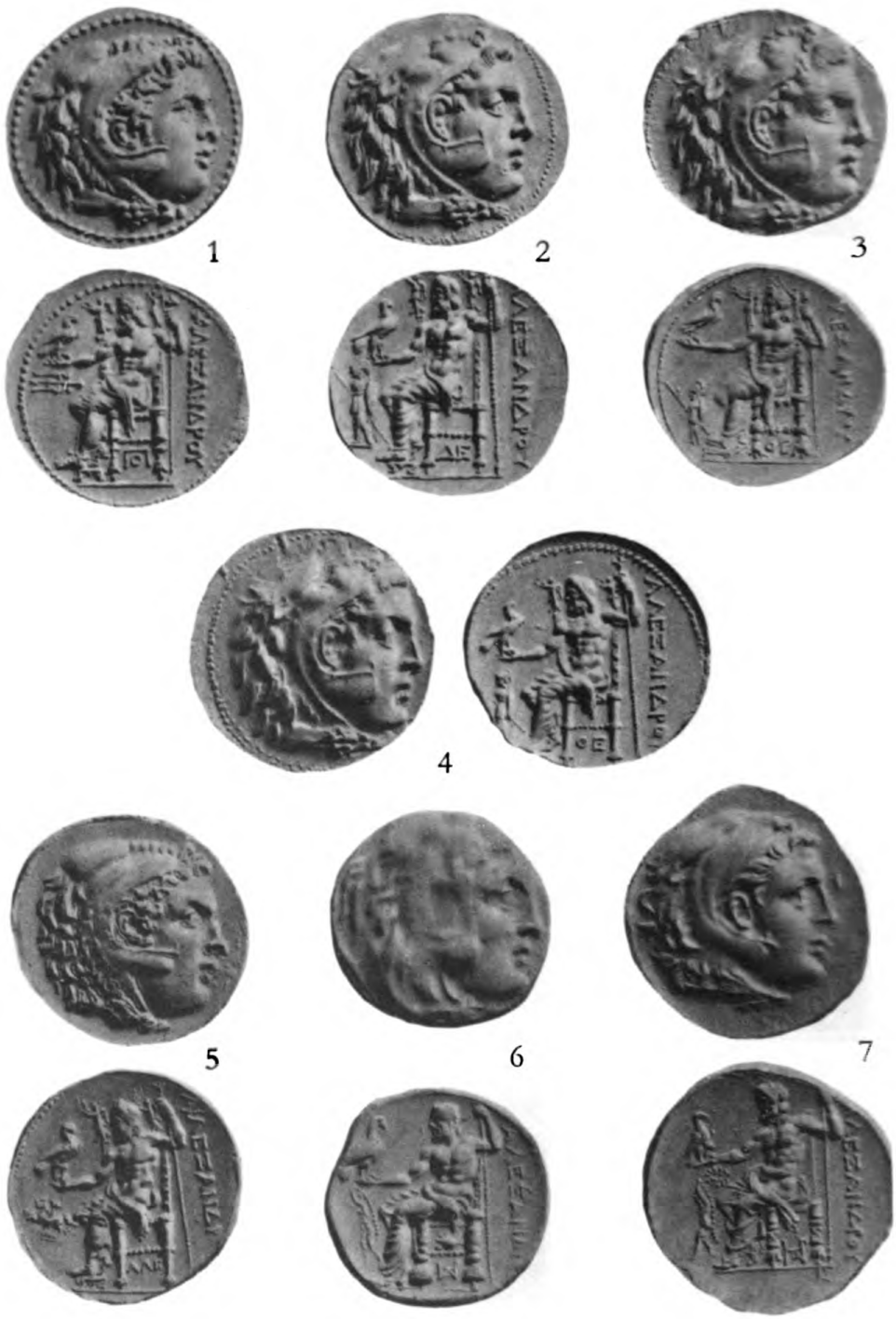
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PELOPONNESIAN ALEXANDERS

Greece(?) 1924 Hoard

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PELOPONNESIAN ALEXANDERS

Patras Hoard

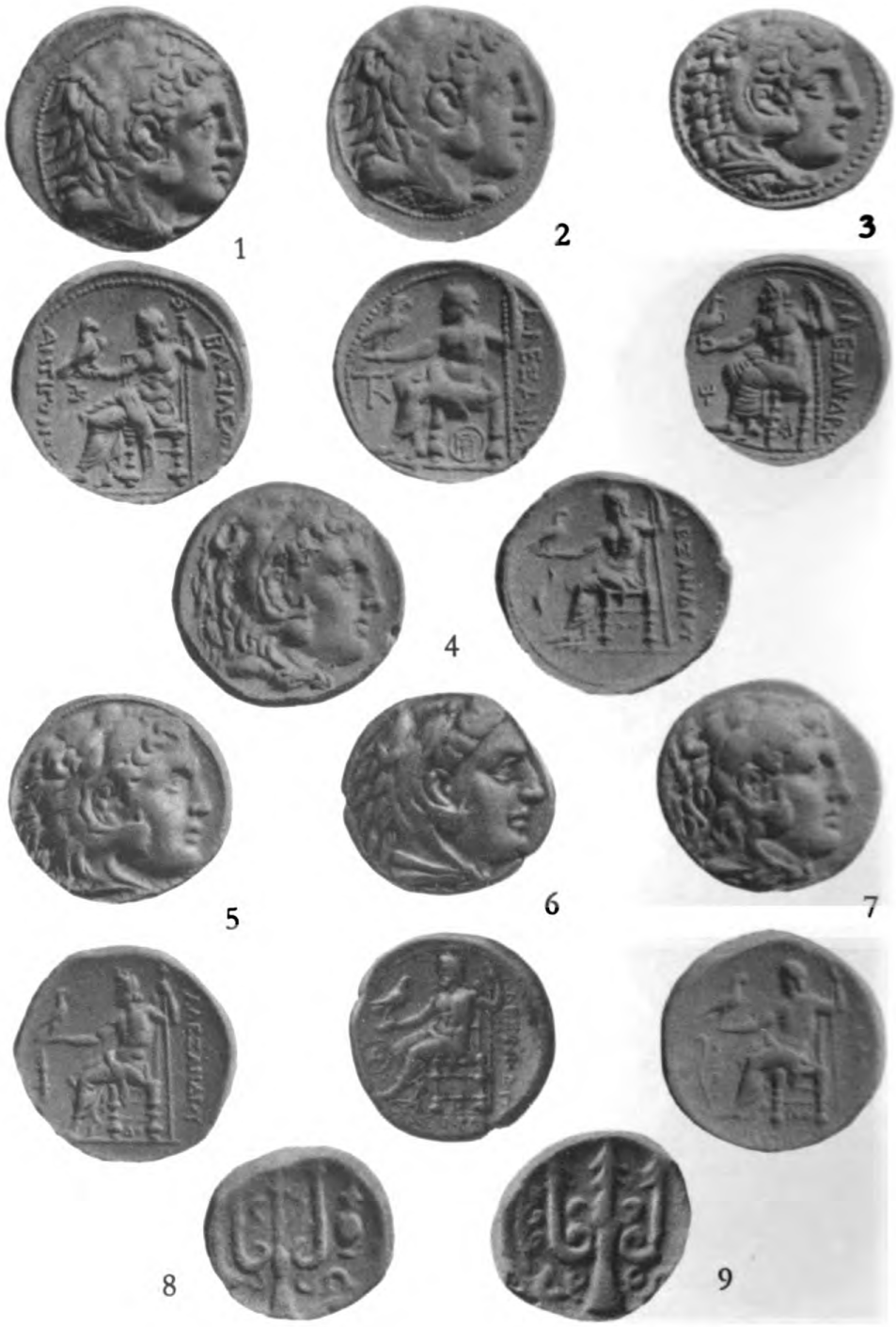
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PELOPONNESIAN ALEXANDERS

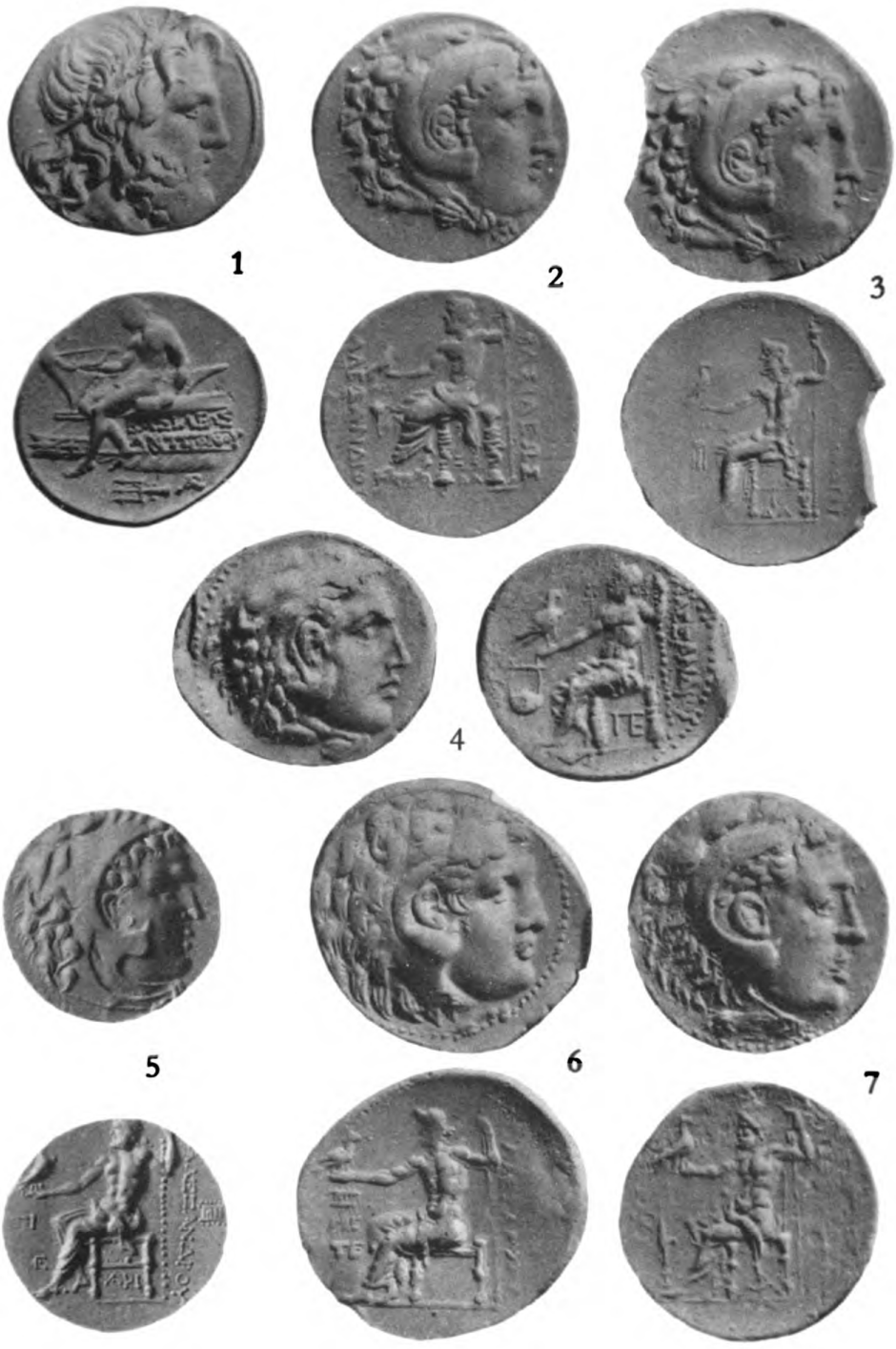
Patras Hoard

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PELOPONNESIAN ALEXANDERS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PELOPONNESIAN ALEXANDERS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



A-1 B-4 C-5



D-6 E-11 F-12

ALEXANDER TETRADRACHMS OF PERGAMUM

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



G-13



H-15



H-17









H-18



H-19



I-21







ALEXANDER TETRADRACHMS OF PERGAMUM

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



J-23 K-25 J-27



K-30 L-33 M-35

ALEXANDER TETRADRACHMS OF PERGAMUM

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



N-30 K-36 O-37



P-38 P-39 Q-40

ALEXANDER TETRADRACHMS OF PERGAMUM

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



L-41 N-44 R-45



S-46 S-47 T-48



ALEXANDER TETRADRACHMS OF PERGAMUM

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



A-1 A-6 B-7



C-14 D-16 E-17

ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



F-19 G-20 H-21



I-22 J-27 K-28

ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



R-54 S-57 T-60



U-63 V-64 W-65

ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



FF-103 GG-104 HH-105

II-106 O-107 T-108

T-109

ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



X-110 X-114 Z-120



CC-126 JJ-127 KK-122

ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



V-128



X-130



S-135









U-138



CC-139



II-142





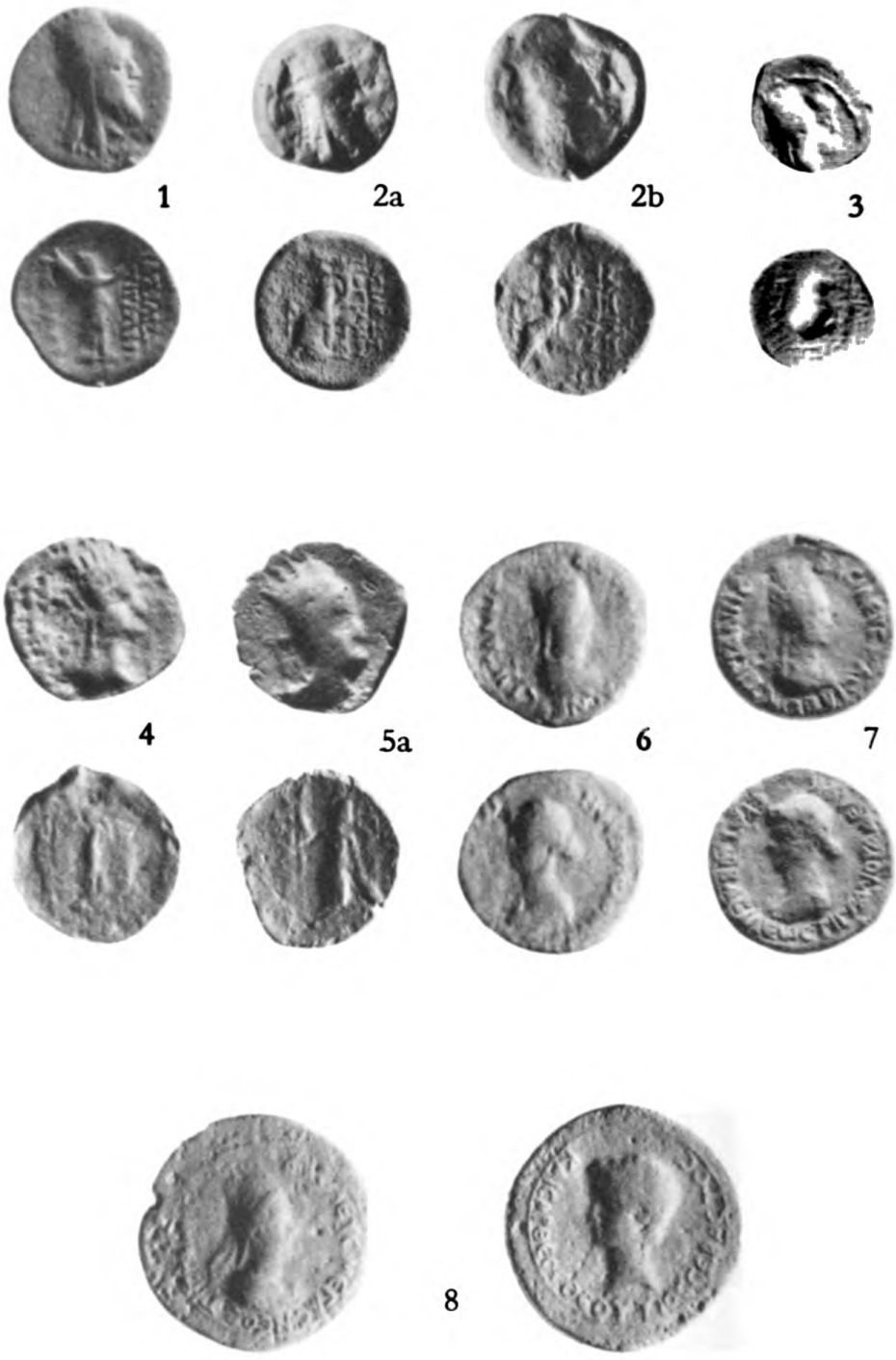


ALEXANDER TETRADRACHMS OF RHODES

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



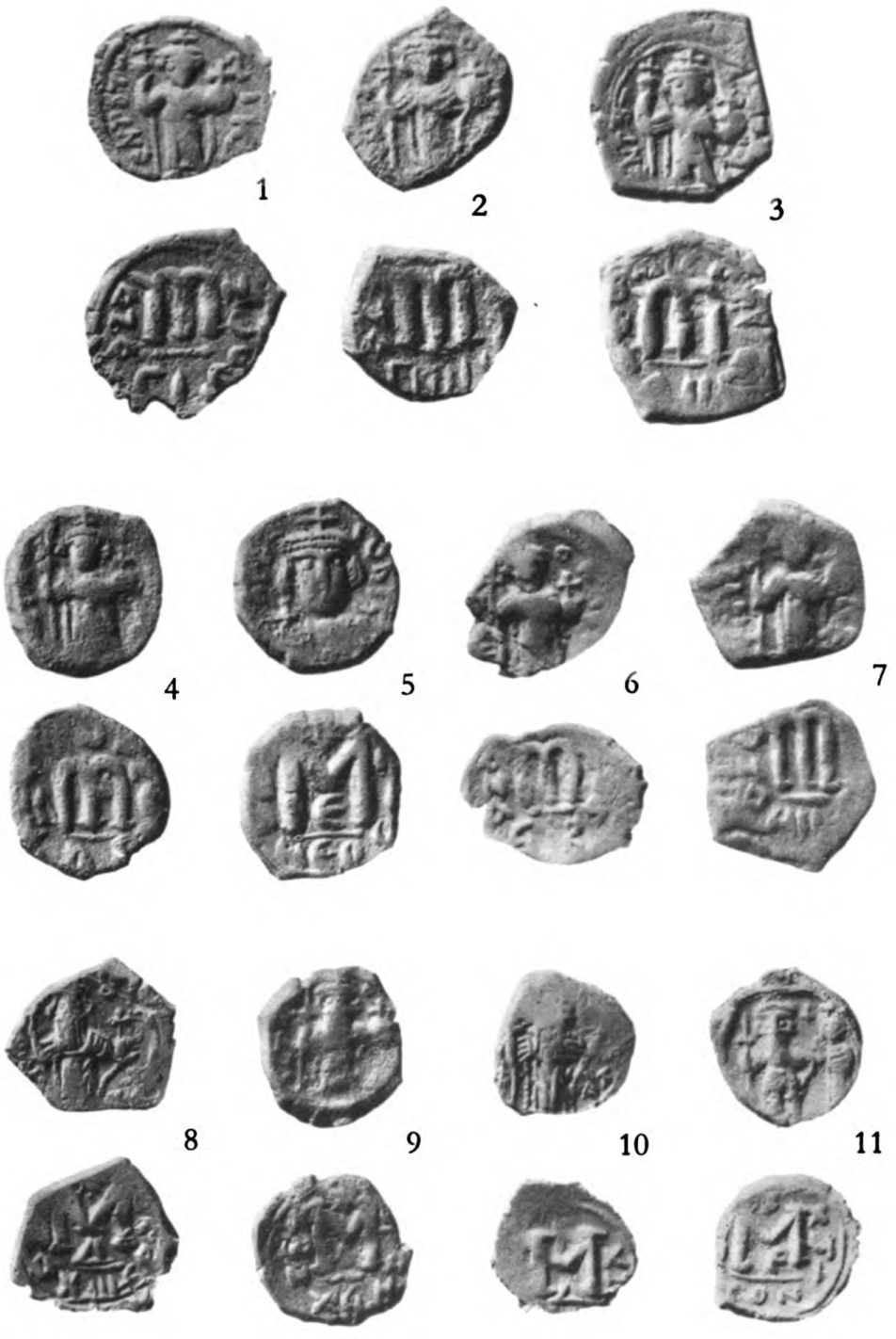
1 2a 2b 3

4 5a 6 7

8

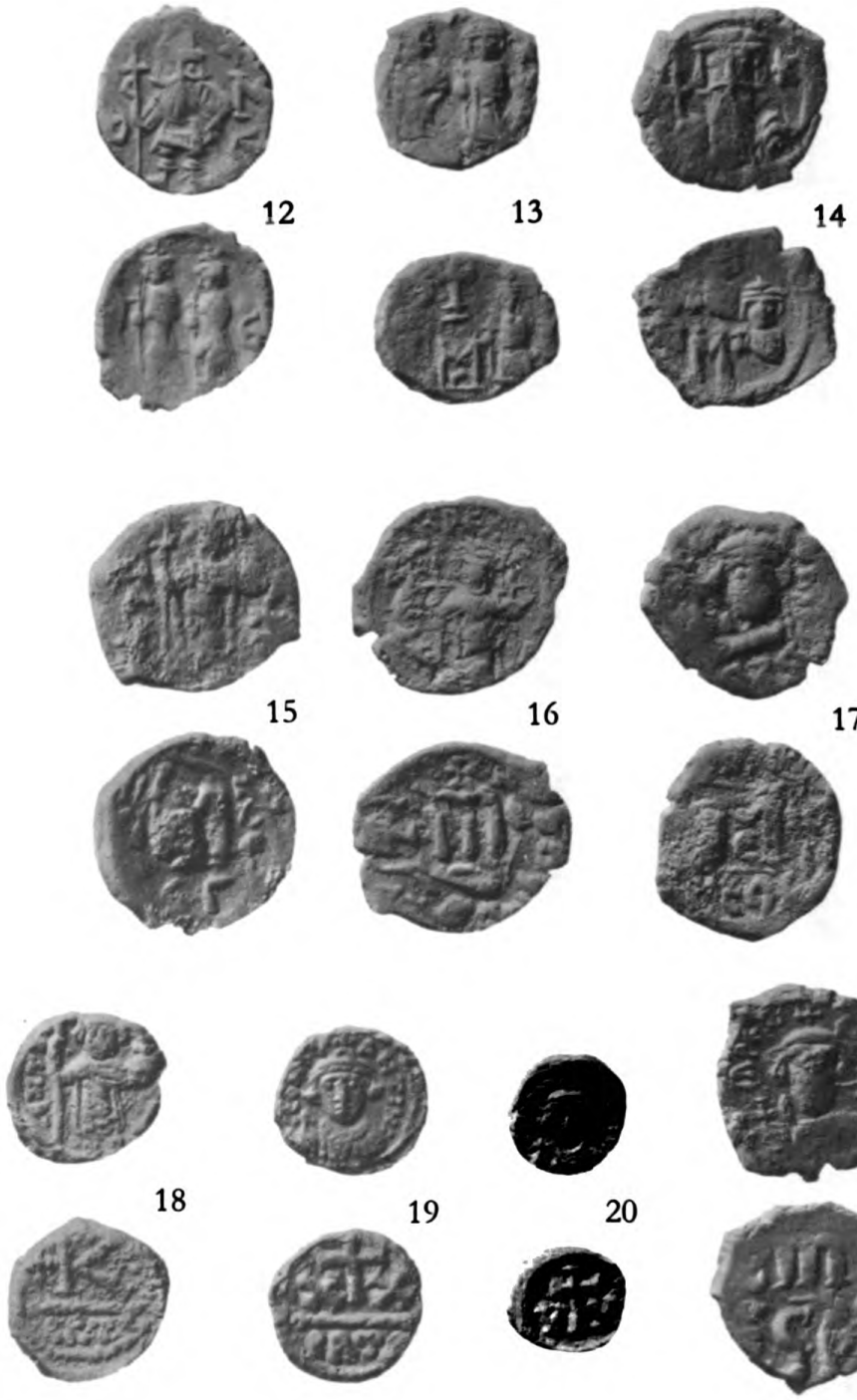
COINAGE OF THE LATER ARTAXIADS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



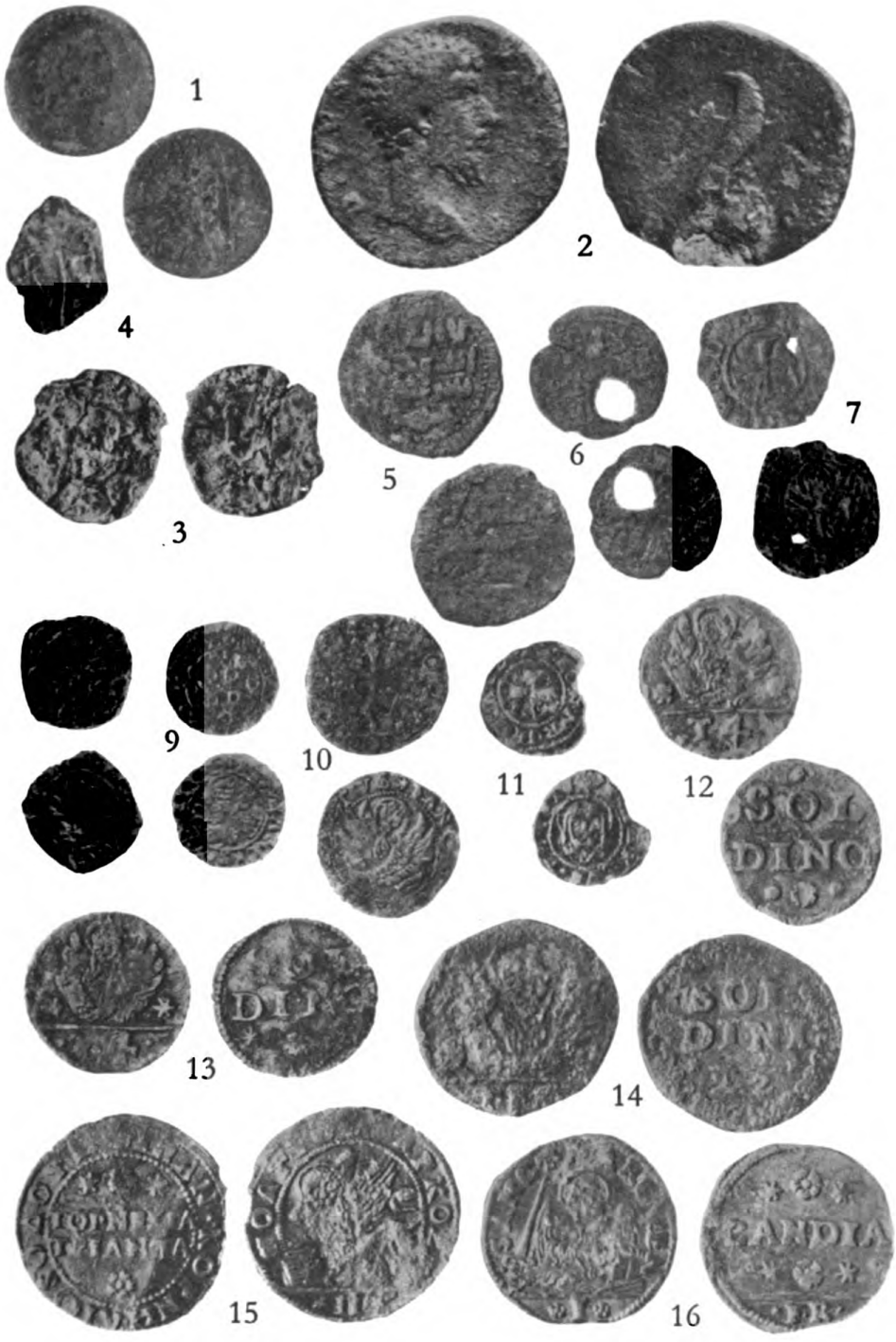
CONSTANS II OR HERACLONAS ?

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



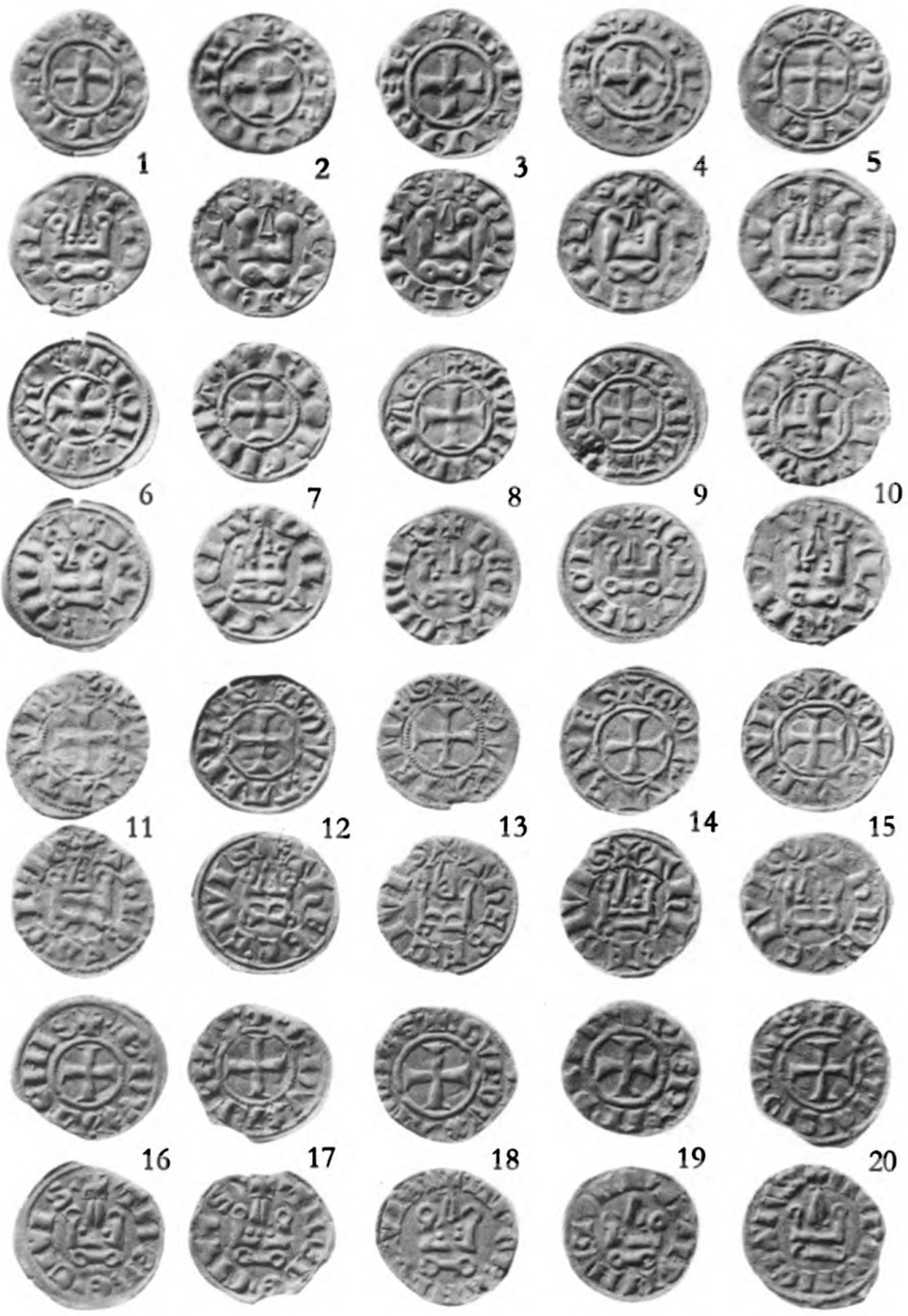
CONSTANS II OR HERACLONAS ?

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



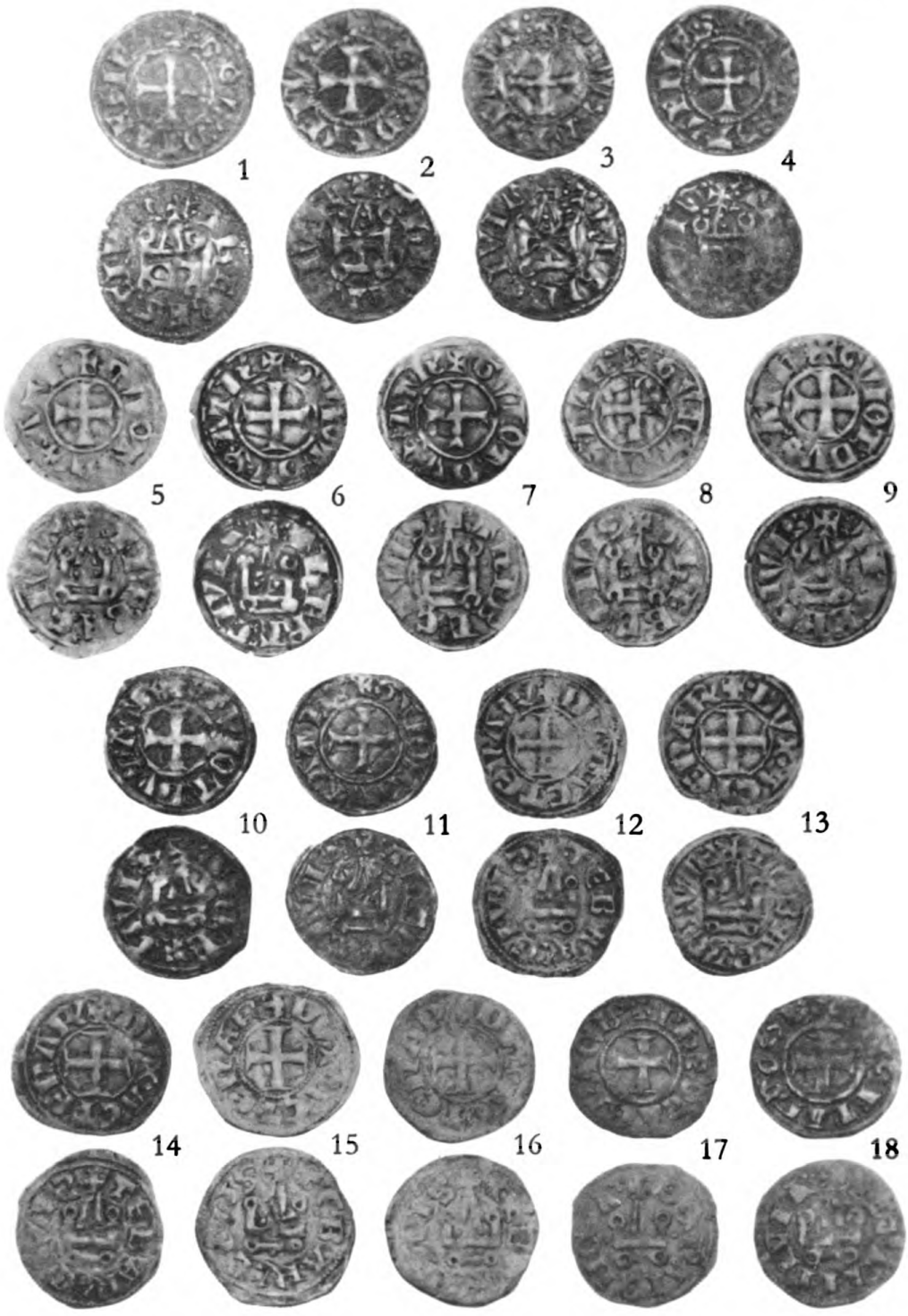
EXCAVATIONS AT AG. PETROS

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PYLIA HOARD

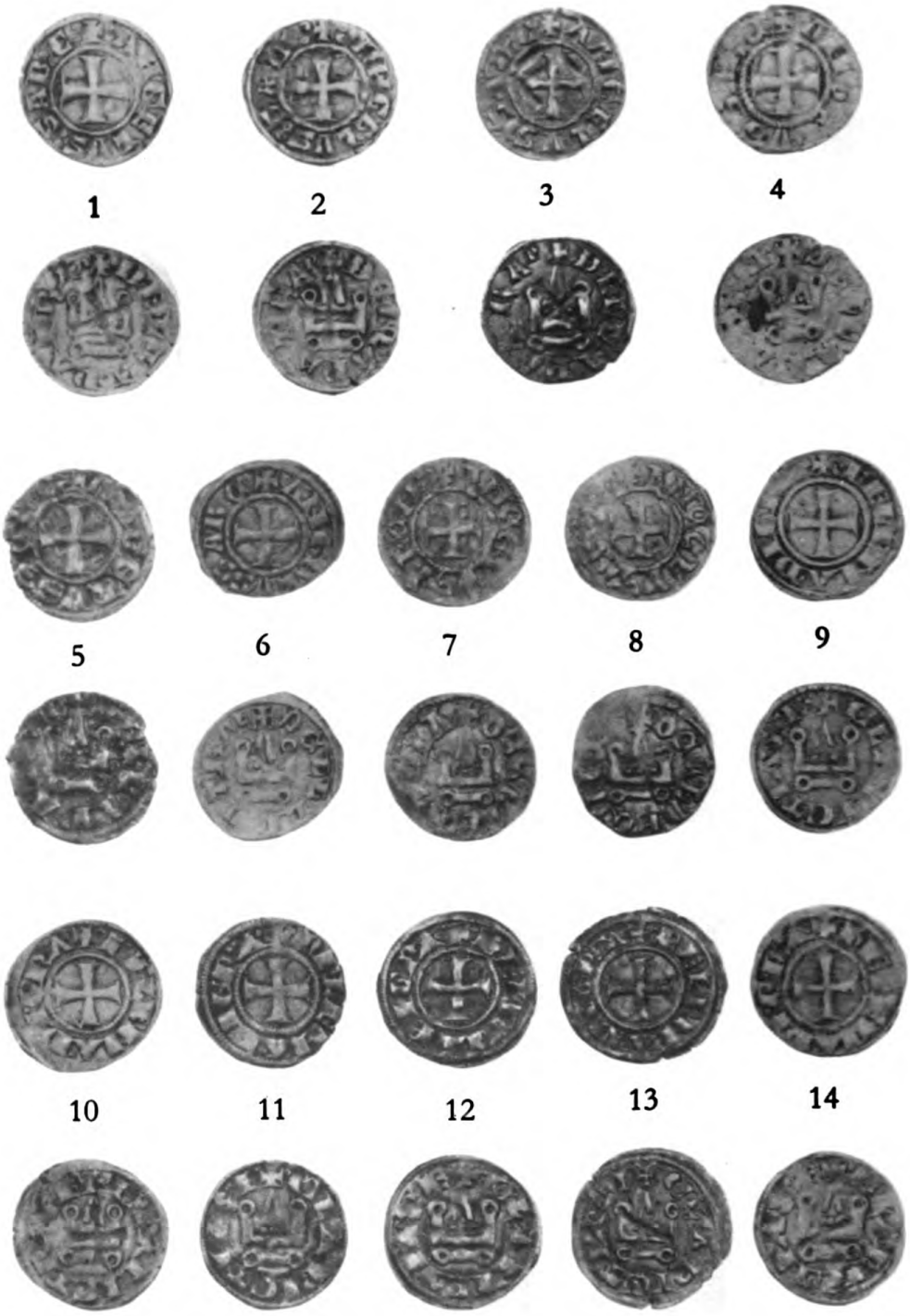
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PYLIA HOARD

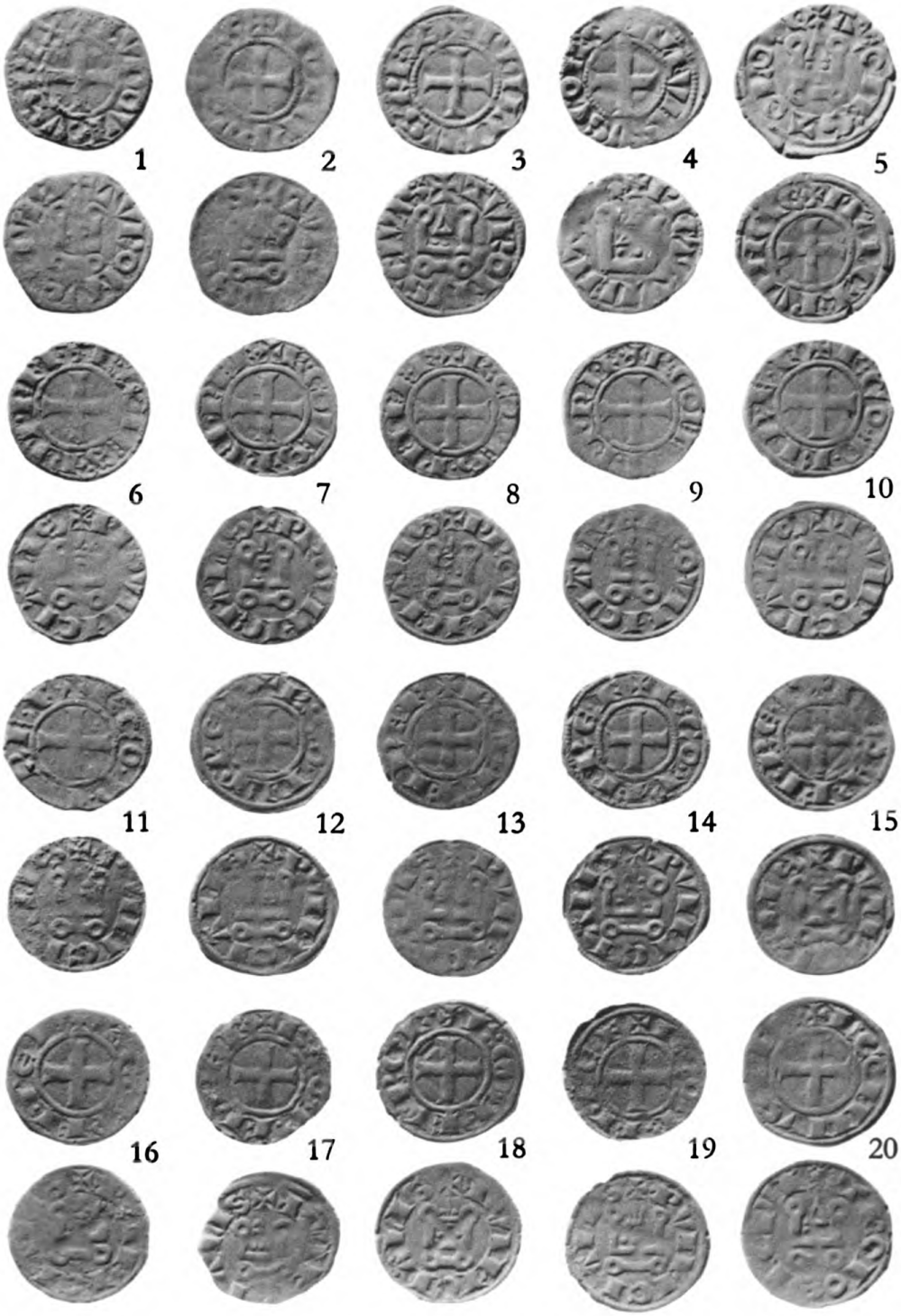
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

XLI



PYLIA HOARD

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



PYLIA HOARD

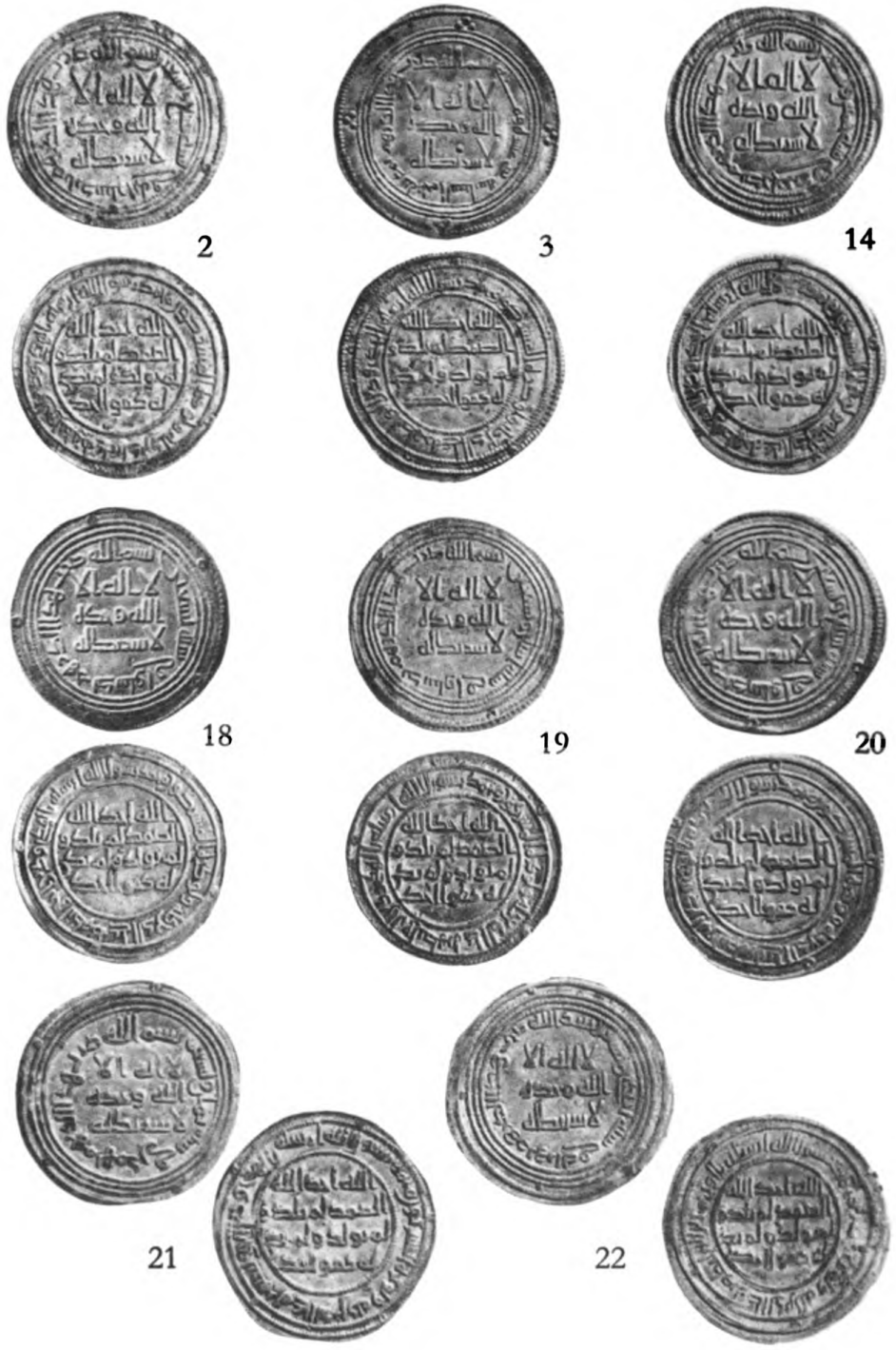
Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

XLIII



HOARD OF FOURTH CENTURY DINARS OF YEMEN

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



2 3 14

18 19 20

21 22

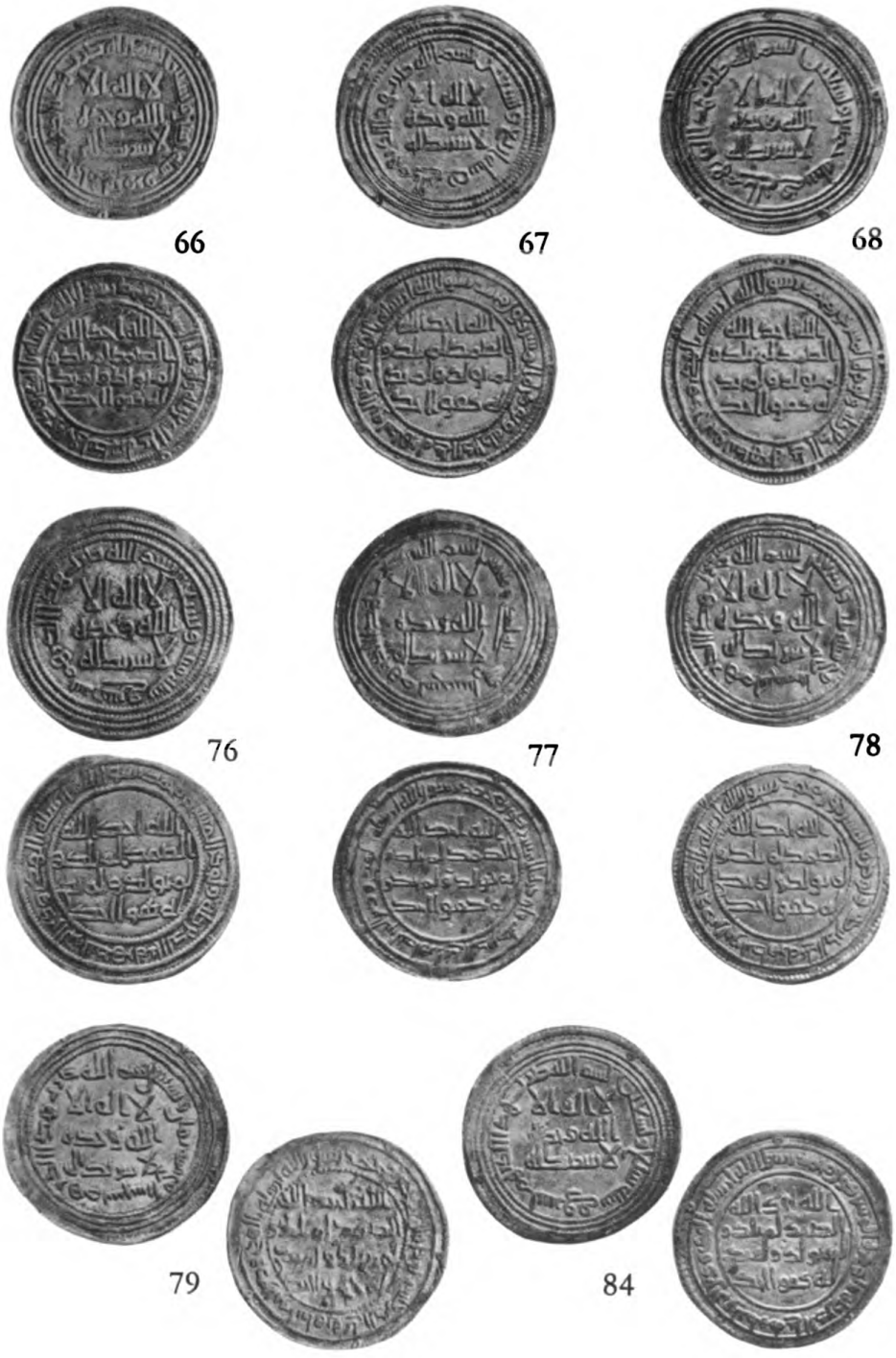
UMAYYAD HOARD FROM AFGHANISTAN

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



UMAYYAD HOARD FROM AFGHANISTAN

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



66 67 68

76 77 78

79 84

UMAYYAD HOARD FROM AFGHANISTAN

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

XLVII



1



2



3



4



5



6



8



9



10

NARAYANI COINS OF COOCH BEHAR

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



11



12



13



14



15



16



17



18



19



20





22





24

DEB RUPEES OF BHUTAN

Digitized by Google

Original from UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0



HERMOSILLO PESO OF 1839

Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

ERSITY OF MICHIGAN

17

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

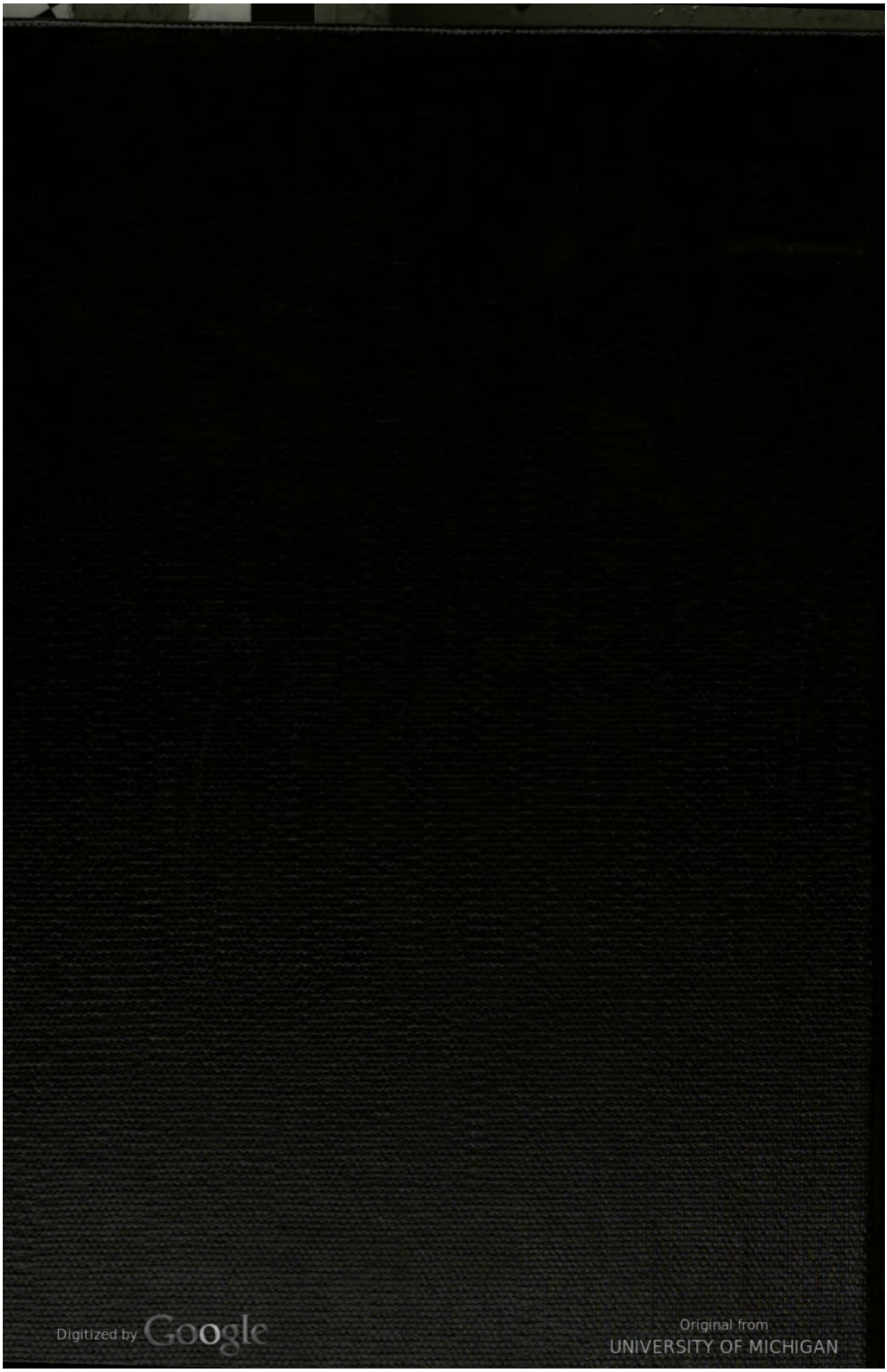
Digitized by Google

Original from
UNIVERSITY OF MICHIGAN

Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

Digitized by Google

Original from
UNIVERSITY OF MICHIGAN


Digitized by Google
Original from UNIVERSITY OF MICHIGAN
Generated on 2016-04-24 17:39 GMT / http://hdl.handle.net/2027/mdp.39015008695671
Creative Commons Attribution-NonCommercial-ShareAlike / http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0